

EXHIBIT 1

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

Civil Action File No.

2:18-CV-01534-KOB

HAMAN, INC. d/b/a KNIGHTS INN,
Plaintiff,

v.

CHUBB CUSTOM INSURANCE
COMPANY, DEFENDANTS A-M,
and DEFENDANTS N-Z,
Defendants.

VIDEOTAPED/VERITEXT VIRTUAL DEPOSITION OF

THOMAS J. IRMITER

Taken Friday, December 27, 2019

Scheduled for 9:00 a.m.

REPORTED BY: DANA S. ANDERSON-LINNELL

Job No.: 3796019

1 VIDEOTAPED/VERITEXT VIRTUAL DEPOSITION OF THOMAS J.
2 IRMITER taken on Friday, December 27, 2019,
3 commencing at 9:14 a.m., at the law offices of
4 Meagher & Geer, 33 South Sixth Street, Suite 4400,
5 Minneapolis, Minnesota, before Dana S.
6 Anderson-Linnell, a Stenographic Shorthand Reporter
7 and Notary Public of and for the State of Minnesota.

8 *****
9

10 APPEARANCES
11

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20 (Appearances continued on next page.)
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22
23
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1 APPEARANCES (continued):

2

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20

21 ALSO PRESENT: Ira Livingston, IV, videographer

22

23 NOTE: The original transcript will be filed with the

24 Mozley, Finlayson, Loggins Law Firm, pursuant to the

25 applicable Rules of Civil Procedure.

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1 THE VIDEOGRAPHER: Good morning. We
2 are going on the record at 9:14 a.m. on
3 December 27th, 2019.

4 Please note that the microphones are
5 sensitive and may pick up whispering, private
6 conversations and cellular interference.
7 Please turn off all cell phones or place them
8 away from the microphones as they can interfere
9 with the deposition audio. Audio and video
10 recording will continue to take place unless
11 all parties agree to go off the record.

12 This begins media unit one of the
13 video-recorded deposition of Thomas J. Irmiter
14 in the matter of Haman, Inc. versus Chubb
15 Custom Insurance Company filed in the United
16 States District Court for the Northern District
17 of Alabama in the Southern Division, Case
18 Number 2:18-CV-01534. This deposition is being
19 held at Meagher and Geer located at 33 South
20 Sixth Street, Suite 4400 in Minneapolis
21 Minnesota.

22 My name is Ira Livingston, IV from
23 the firm Veritext Legal Solutions, and I am the
24 videographer. The court reporter is
25 Dana Anderson from the firm Veritext Legal

1 Solutions. I am not authorized to administer
2 an oath. I'm not related to any party in this
3 action, nor am I financially interested in the
4 outcome.

5 Counsel and all present in the room
6 and everyone attending remotely will now state
7 their appearances and affiliations for the
8 record. If there are any objections to
9 proceeding, please state them at the time of
10 your appearance beginning with the noticing
11 attorney.

12 MR. TAYLOR: My name is Wayne
13 Taylor, and I represent Chubb Custom Insurance
14 Company, the defendant in the case.

15 MR. LEE: Yeah. I'm David Lee here
16 also on behalf of Chubb.

17 MR. CONCHIN: I'm Gary Conchin here
18 on behalf of Haman, Inc.

19 THE VIDEOGRAPHER: And will the
20 court reporter please swear in the witness, and
21 we may proceed.

22 THOMAS J. IRMITER,
23 called as a witness, being first duly sworn,
24 was examined and testified as follows:

25 MR. TAYLOR: This will be the

1 deposition of Mr. Thomas J. Irmiter being taken
2 by counsel for defendant Chubb Custom Insurance
3 Company in the case of Haman, Inc. doing
4 business as Knights Inn versus Chubb Custom
5 Insurance Company pending in the United States
6 District Court for the Northern District of
7 Alabama. The deposition is being taken
8 pursuant to agreement of counsel and a notice
9 of deposition, which I will mark in just a
10 moment. The deposition is being taken for
11 purposes of discovery, cross-examination and
12 any other purpose permitted by the Federal
13 Rules of Civil Procedure.

14 EXAMINATION

15 BY MR. TAYLOR:

16 Q. Mr. Irmiter, my name is Wayne Taylor, and
17 I met you just a few moments ago. I represent
18 Chubb in connection with a lawsuit. And you
19 have been designated by the plaintiff, Haman,
20 Inc. as an expert witness in this case in
21 connection with two separate claims, one of
22 them being a fire claim and the other being a
23 wind claim. Is that your understanding?

24 A. Yes.

25 Q. Okay. Could you please state your full

1 name for the record.

2 A. Thomas Irmiter, I-r-m-i-t-e-r.

3 Q. Do you have a middle name?

4 A. James.

5 Q. And you -- I know Thomas is your legal
6 name. Do you go by Tom, or do you have aliases
7 or nicknames that you go by?

8 A. Tom.

9 Q. And how old are you, sir?

10 A. Sixty-two.

11 Q. And your date of birth?

12 A. 10/19/57.

13 Q. And have you ever given a deposition
14 before?

15 A. Yes.

16 Q. On how many occasions?

17 A. Over 500.

18 Q. Have all 500 depositions been as an expert
19 witness?

20 A. Yes.

21 Q. And the 500 depositions that you have
22 given -- over 500 depositions that you have
23 given as an expert witness, over what period of
24 time is that?

25 A. I think I did my first case

1 40 years -- 35 years ago, something like that,
2 maybe 40 years ago.

3 Q. So that would be approximately 1980?

4 A. Yeah '88, '89, somewhere in that range.

5 Q. Well, and all of the depositions you have
6 ever given have always been as an expert
7 witness, not as a fact witness?

8 A. Always as an expert witness; at least
9 that's what I recall.

10 Q. I take it you understand then the ground
11 rules for a deposition?

12 A. I do, yeah.

13 Q. And you understand that if you give me an
14 answer to a question, I have to assume that you
15 understood my question?

16 A. Correct.

17 Q. Therefore, if you don't understand my
18 question, please let me know and I'll do my
19 best to rephrase it so that you do understand
20 what I am asking. Fair enough?

21 A. Sounds good.

22 Q. Wonderful. You also know that I need
23 verbal responses?

24 A. Yes.

25 Q. Even though the deposition is being

1 videotaped, I do need -- nods of the head don't
2 show up on the record very well, for example.
3 So if, for example -- and it's human nature for
4 people to do that; if you give me a nod of the
5 head or you give me a grunt or whatever or an
6 uh-huh or uh-uh, I'll ask you: Is that a yes
7 or a no? Please understand I'm not trying to
8 be rude, I'm just trying to make sure we have a
9 clear record of your deposition today.

10 A. I understand.

11 Q. Very good. This is not a marathon, so we
12 may be here for only a couple of hours, we may
13 be here all day. I just don't know the answer
14 to that because I don't know what you're going
15 to say here today. But you have the right at
16 any time, just -- if you want to take a break,
17 you just say so, and we'll take a break; five
18 minutes, ten minutes, 15 minutes, whatever,
19 however much time you need in order to do that.
20 Fair enough?

21 A. Sounds great.

22 Q. Very good. And finally, oftentimes you're
23 going to know where I am going with my
24 question. Please wait until I finish my
25 question before you begin your answer, and I

1 promise you I will do my absolute best to not
2 interrupt you while you're giving an answer
3 before I ask my next question. The hardest
4 working person in the room is to your left, the
5 court reporter, and she -- as good as court
6 reporters can be, they can't get both of us
7 speaking at the same time.

8 A. Agreed.

9 Q. Very good.

10 (Exhibit Number 31 marked for
11 identification.)

12 BY MR. TAYLOR:

13 Q. Let me show you what's been marked as
14 Defendant's Exhibit 31 for identification.

15 MR. TAYLOR: Gary, I'm starting --
16 because the last one, I believe, was
17 Mr. Bukhari's, 30, so I am starting at 31
18 today.

19 BY MR. TAYLOR:

20 Q. And that is a copy of the deposition
21 notice. Have you ever seen this before?

22 A. (Views document.) Yes.

23 Q. When did you see this for the first time?

24 A. When it arrived. I can't tell you
25 specifically the date. I think it came a

1 couple of weeks ago.

2 Q. Okay. And do you know who provided it to
3 you?

4 A. Mr. Conchin's office would have sent it.

5 Q. And it's just -- you're not here under
6 subpoena because we have an agreement that we
7 would produce our witnesses without subpoenas.
8 And so we just served a notice in order for you
9 to be here. And it just indicates the date,
10 time and place for your deposition, which is
11 here and today?

12 A. Yes.

13 Q. What did you do in order to prepare for
14 your deposition today?

15 A. I spent some time the last couple of days
16 reviewing my joint report on the wind claim
17 with -- that was authored by Brian Johnson and
18 myself. I reviewed the Gary Mulder report on
19 the wind claim. I reviewed the estimate that
20 had been put together by Chuck Howarth for the
21 wind claim. I reviewed all of the photos that
22 were taken from this project by our team.

23 Let's see. I reviewed the -- for the very
24 first time I had seen the U.S. -- I want to say
25 U.S. Health or whatever they're called. It's

1 the -- on the fire claim. It's the group that
2 did some sampling and gave a report on the fire
3 claim. And then I read the deposition of one
4 of the gentlemen from the fire claim. I can't
5 remember his name. I want to say Tom. Is
6 there a Tom on that claim? But I read that
7 yesterday, reviewed the estimate from Belfor on
8 the fire claim. I reviewed the estimate from
9 Howarth on the fire -- on the -- I'm sorry, on
10 the fire -- on the fire claim. And I reviewed
11 the estimate from -- I want to say -- I don't
12 know if it was Sedgwick or York or who, but I
13 reviewed that estimate as well. And I reviewed
14 all of the analytical data that we submitted
15 and the report and all of the photos. I also
16 reviewed, I think, for the first time -- I
17 can't remember if I reviewed it before the SEA
18 report as well on the fire claim.

19 Q. And who provided you with all of that
20 information?

21 A. Counsel for -- for the plaintiffs.

22 Q. That would be Mr. Conchin's office?

23 A. Yes.

24 Q. Did you meet either by telephone or some
25 other remote basis with anyone in order to

1 prepare for your deposition?

2 A. Mr. Conchin and I had a brief
3 conversation.

4 Q. When you say you had a brief conversation,
5 how brief are we talking about?

6 A. Probably a minute and a half. I don't do
7 a lot of prep with counsel anymore based on the
8 number of times that I've done this. So there
9 was no need to go any further than just asking
10 a question, "Are you ready?" and me saying
11 "yes," and then we talked about his father.

12 Q. Is that really the extent of your
13 conversation with Mr. Conchin?

14 A. Yes, that's the extent.

15 Q. And when was this conversation?

16 A. Yesterday. Yep.

17 Q. Did you have any discussions with anyone
18 else other than Mr. Conchin in order to prepare
19 for your deposition?

20 A. No.

21 Q. Did you confer with anybody in your
22 office?

23 A. No. And you have to understand our
24 offices are virtual. We don't have a brick and
25 mortar location or locations anymore. That's a

1 little more difficult to do these days.

2 Q. I understand. Are you married?

3 A. Yes.

4 Q. And your wife's name?

5 A. Why is that relevant to the proceedings?

6 Q. Just try to get some background.

7 A. Well --

8 Q. You don't want to --

9 A. -- you don't need her name. I'm sorry.

10 That's -- I'm not going to be too

11 argumentative, but there are certain things

12 that I'm just going to draw a line on.

13 Q. Where do you live, sir?

14 A. St. Paul, Minnesota.

15 Q. May I have your address, please?

16 A. 2168 Juliet Avenue.

17 Q. And how long have you lived there?

18 A. Coming up on two years.

19 Q. And I take it your wife lives there with
20 you as well?

21 A. She does.

22 Q. And does anybody else live in that house?

23 A. My daughter.

24 Q. How old is your daughter?

25 A. Again, relevance, sir.

1 Q. Just trying to -- is she adult age or
2 just --

3 A. She's a teenager.

4 Q. That's all I need to know. Thank you.

5 A. Thanks.

6 MR. LEE: Let me say this,
7 Mr. Irmiter, you've got a lawyer. If there's
8 something objectionable, he will do the
9 objections.

10 THE WITNESS: Well, so will I, sir,
11 I'm just saying, but anyway, I'm not --

12 MR. CONCHIN: Well, it's -- guys, if
13 he lived in Alabama and if his folks might be
14 witness -- I mean, might be jurors, that would
15 be relevant. But I don't mind him asserting
16 his privacy rights. And I would have objected
17 if he wouldn't have said something maybe so.
18 We'll get through it. Let's go ahead.

19 THE WITNESS: Yep.

20 BY MR. TAYLOR:

21 Q. Is your residence on Juliet Avenue also
22 your work address?

23 A. Yes.

24 Q. Okay. Does anybody with your company also
25 work out of that address besides you?

1 A. No.

2 Q. As you said, it's -- everything's virtual
3 now?

4 A. Yes.

5 Q. What is the best work number to reach you
6 if I needed to reach you for some reason?

7 A. 61 -- I'm sorry. 651.222.6509.

8 Q. And that is your work number?

9 A. Yes.

10 Q. Is that also a cell, or is it a landline?

11 A. Good question. I don't know if it's
12 landlined or -- I don't know anymore.

13 Q. But that's the best way to reach you?

14 A. Yes. We've had that number since our
15 inception, so I'm assuming it's a landline.

16 Q. Okay.

17 A. I think it's all tied into some type of a
18 cloud-based system now, so...

19 Q. Well, if you're on the road somewhere and
20 somebody dialed that number, would it pick
21 up -- would you pick up --

22 A. No, I would not pick that up. My
23 administrative assistant would pick that up,
24 and then she would forward messages to me.

25 Q. Very good.

1 A. Yeah.

2 Q. And your administrative assistant, is she
3 located in Minnesota?

4 A. Yes.

5 Q. Okay. But she doesn't work at 2168 Juliet
6 Avenue?

7 A. No.

8 Q. She likewise works out of her home?

9 A. Yes.

10 (Exhibit Number 32 marked for
11 identification.)

12 BY MR. TAYLOR:

13 Q. Mr. Irmiter, let me show you what has been
14 marked as Defendant's Exhibit 32 for
15 identification.

16 A. Okay.

17 Q. The first page says Exhibit C because this
18 is the way that I had received it.

19 A. (Views document.)

20 Q. And I understand that this is a copy of
21 your report in connection with -- as well as, I
22 guess, your CV in connection with the wind
23 claim, is that correct?

24 A. Yes. The back section, which in here
25 looks to be some full-page photos, are -- do

1 not represent all of the photos that were taken
2 for the wind claim. There are at least one,
3 two, three, four, five, six additional photo
4 logs that are quite extensive for the wind
5 claim, including infrared scanning, core cuts
6 of the roof, documentation of the conditions at
7 the time of that inspection. So those are not
8 part of this exhibit and are missing.

9 Q. Were they part of your report?

10 A. Absolutely. Yes.

11 Q. Okay. Because this is the way we received
12 it.

13 A. Okay.

14 Q. Okay. So how many photos would you say
15 are missing from this report?

16 A. Oh, boy. It probably -- because we --
17 what we did is -- they're labeled, building 1,
18 building 2 and building 3. I think others have
19 labeled them building A, B and C. One for us
20 is the ballroom, lobby building. Two, if I
21 recall, is the building where the fire was.
22 And three is the other building. And so we did
23 full exterior inspections of those, full
24 interior inspections related to the water
25 damage claims and, as I said before, infrared

1 scanning, those were done at night, of the roof
2 assemblies. And then fairly detailed
3 inspections of the roof assemblies, including
4 all of the seams. We performed, I believe, two
5 core cuts on each roof. So it's got to be --
6 there might be as many as 900 photos.

7 Q. So there were -- there are approximately
8 900 photos that were attached as part of your
9 report --

10 A. Yes. And those are --

11 Q. -- that are missing?

12 A. Well, they're not -- I'm not going to say
13 whether they're missing. They're certainly not
14 part of this document.

15 Q. Okay. Well, let's --

16 MR. CONCHIN: Wayne, are you showing
17 him a document entitled Causation Scope and
18 Repair and Code Submission dated April 26,
19 2019, and then also his storm damage report?

20 MR. TAYLOR: Yes. I'm -- what I'm
21 showing him is what was Exhibit C to the
22 Rule 26 expert disclosure that you served.

23 MR. CONCHIN: Yeah. We sent a CD
24 with the pictures as he had sent to us, but we
25 have no objection to agreeing to provide you

1 that CD again. And my recollection is we sent
2 that separately because it's on a disc or maybe
3 more than one disc.

4 BY MR. TAYLOR:

5 Q. Okay. If I counted correctly,
6 Mr. Irmiter, there are 15 photos that were
7 attached to this report that we've marked as
8 Exhibit 32 for identification.

9 A. Okay.

10 Q. What I handed you, the exhibit that I
11 handed to you.

12 A. Yeah. That's what I have in front of me.

13 Q. Okay.

14 A. These are not part of this report. These
15 were taken after this report was issued if you
16 look at the dates of them.

17 Q. Okay. So the photographs that are
18 attached are not part of your report, and there
19 are approximately 500 photographs that are
20 missing --

21 A. Correct. And if you look --

22 Q. -- that go with the report?

23 A. Yes. And if you look on our -- in our
24 report, section 1.9, page 4 of 24, one, two,
25 three, fourth bullet point down, the -- and

1 this is under the additional documents that we
2 used for reference, there's an indication here
3 that says, "Photographs and thermal imaging
4 taken by Forensic Building Science." So we
5 reference that as documents that we used in
6 preparing this report. We have produced those.
7 I'm not trying to play hide the ball. We
8 didn't receive a subpoena for documents on
9 this. Had we received a subpoena for
10 documents, you would have gotten all of that
11 information.

12 Q. Well, actually, we did serve a subpoena on
13 you, and we did get your file, but I had no way
14 of knowing that all of these photographs
15 actually should have been part of your report.
16 And it doesn't say they're actually attached to
17 your report, just says that you reviewed them
18 and -- as part of your analysis. But that's --
19 you know, we'll get to that.

20 A. Sure.

21 Q. And that's fine.

22 A. Sure. That's fine. Yep.

23 Q. So the 15 photos that are attached to this
24 exhibit, Defendant's 32 that we've marked for
25 identification, are actually not part of this

1 report. Is that your testimony?

2 A. Correct. These came out -- these were
3 taken -- this report was signed, if you look at
4 the date on it -- oh, when did we sign that
5 report? Just a minute. 2015, I believe.
6 Yeah, it's a 2015 report. And these photos
7 were taken in 2019.

8 Q. Okay.

9 A. So August 20th, 2015, is when this report
10 was issued. These were taken four years later
11 or three and a half years later.

12 Q. Fair enough.

13 MR. TAYLOR: Gary, when you sent
14 that CD, was there a clarification that all of
15 those photographs were actually part of his
16 report as opposed to just being random
17 photographs, do you know?

18 MR. CONCHIN: Well, I think we
19 sent -- I mean, the report references the
20 photographs. And because of the Dropbox
21 situation, I think that's how we would have
22 sent it. I'm making a note for Scarlet to find
23 out what went on there and send it again. I
24 can't remember frankly.

25 THE WITNESS: And if I may, the

1 photos -- sorry.

2 MR. CONCHIN: Go ahead.

3 THE WITNESS: If I may, the photos
4 that we submitted with our report are put into
5 a Word document. There's two to a page.

6 BY MR. TAYLOR:

7 Q. Okay.

8 A. It says Forensic Building Science, it says
9 building 1, and then it would have.

10 Q. That's fine?

11 A. They're all there.

12 Q. That's fine. And I suspect I got the
13 photographs. I just -- you know, a lot of
14 times when we're dealing with experts, they
15 take more photographs that are a part of the
16 report. And there is nothing that I received
17 that indicated that as many of 500 photographs
18 actually should have been part of your report.
19 I didn't know that, and I will just do the best
20 that I can with what I have here today.

21 A. Sounds good.

22 Q. And if we turn to the second page of what
23 we've marked as 32 for identification, this is
24 a document that you signed it looks like
25 digitally on April 26th, 2019 --

1 A. Yes.

2 Q. -- is that right? And basically it's just
3 saying that the report that's attached, which
4 was previously prepared, is your report and
5 contains your opinions on causation and scope
6 of repairs, is that right?

7 A. Well, yes, it's a joint report with Brian
8 Johnson and myself.

9 Q. We'll get to that in a minute. The second
10 page, though, that's only signed by you, right?

11 A. This one is, yes.

12 Q. And it says April 26th, 2019?

13 A. Yes.

14 Q. Okay. And you are referencing Haman,
15 Inc. --

16 A. Yes.

17 Q. -- insurance Company -- Chubb Custom
18 Insurance Company?

19 A. Yes.

20 Q. And you say Dates of Loss. We've got
21 March 22, 2014. That would be the fire loss?

22 A. Yes.

23 Q. And April 28, 2014. And that would be the
24 wind claim?

25 A. Yes.

1 Q. Then it says Property, Knights Inn, 1121
2 9th Avenue Southwest, Bessemer, Alabama?

3 A. It does.

4 Q. Okay. All right. We will back to this
5 page in a little while. If we turn to the next
6 page. At the top it says Thomas J. Irmiter.
7 Would that be the beginning of your CV or
8 résumé?

9 A. It is -- important to note is right below
10 the phone number there is a run date of 4/23/19
11 so this is not the most up to date.

12 Q. This is your CV as of April 23, 2019?

13 A. Correct. There are additional things that
14 have occurred since then.

15 Q. Okay. Well, as we get to a section, if
16 there is something that with we need to add or
17 if you have a more recent copy with you, we can
18 deal with it that way. I guess I'll ask you a
19 few questions before we start running through
20 your résumé, which, according to this, is 19
21 pages long, is that right?

22 A. Yes.

23 Q. What is the most recent update for your
24 CV? What date was that done?

25 A. That would have been, I believe, 11/25/19

1 is what I looked at yesterday when I was
2 looking in my CV. And there are things to add
3 on to that that have occurred since 11/25.

4 Q. Okay.

5 A. It's been a busy year.

6 Q. We'll get to that in just a minute.

7 Did you go to college?

8 A. I did.

9 Q. Okay. And I think it's somewhere in your
10 CV. I think it's towards the back as I recall
11 from reviewing it.

12 A. Page 7.

13 Q. Page 7. Thank you. So if we turn to
14 page 7 of your CV, indicates that you went
15 to -- is it "Hamline"?

16 A. Hamline.

17 Q. Hamline University?

18 A. Yes.

19 Q. And where is that located?

20 A. St. Paul, Minnesota.

21 Q. And you got a Bachelor of Arts degree in
22 1979?

23 A. Yes.

24 Q. And in what area of study did you get your
25 Bachelor of Arts?

1 A. English.

2 Q. Okay. And then the next item of
3 education, it says AWCI International. What
4 does AWCI stand for?

5 A. That is the Association of Wall and
6 Ceiling International. It's where the EIFS and
7 stucco and -- for example, above us here, the
8 suspended ceiling, fire-rated ceilings, those
9 kinds of things, it's that group essentially.

10 Q. Okay. And it says you got -- you received
11 something, and I don't know what it was, in
12 2002, is that correct?

13 A. What do you mean you don't know what it
14 was? It says mold remediation --

15 Q. Well, I'm going to ask you what that is.

16 A. Okay.

17 Q. But you got some kind of certification --

18 A. Yes.

19 Q. -- or certificate or something in 2002,
20 right?

21 A. I did, yes.

22 Q. Okay. And what is it that you received
23 from AWCI International in 2002?

24 A. This was an eight-hour class on site
25 documentation for water damage that occurs from

1 improperly installed EIFS windows and those --
2 and then how to document visually mold
3 conditions and then how to actually sample in
4 the field both using tape-lift Air-O-Cell
5 cassette, using bulk sampling, using swab
6 sampling and primarily where to sample.

7 Q. And so this was an eight-hour class. Was
8 it just one day?

9 A. Yes.

10 Q. Okay. Was there any kind of an
11 examination that you --

12 A. Yes.

13 Q. -- had to complete afterward?

14 A. Yes.

15 Q. Okay. And was that part of the eight-hour
16 course, or was it eight hours of class and then
17 the exam?

18 A. It was part of the class.

19 Q. Okay. And was it a 25-question exam,
20 50-question exam?

21 A. I don't -- I think it was a hundred
22 multiple choice questions if I remember.

23 Q. And what -- did you receive a
24 certification or a designation as a result of
25 taking that eight-hour class and then the test?

1 A. I'm sure I did, yeah. I don't have it
2 anymore. I don't hang those on my wall, so...

3 Q. Do you know what the designation or
4 certification is actually called?

5 A. No, I don't recall anymore.

6 Q. Whatever certification or designation that
7 you received in 2002, do you have to update it
8 periodically in order to maintain that
9 designation or certification or whatever it
10 was?

11 A. No, not this one. Unlike my license as a
12 building code official, that's -- but here I
13 don't have to.

14 Q. Okay. Then the next item that's listed is
15 University of Wisconsin advanced project
16 management class in 2007?

17 A. Yes.

18 Q. And that says it was from the school of
19 engineering?

20 A. Yes.

21 Q. Okay. What exactly was the advanced
22 project management class?

23 A. I had applied to the University of
24 Wisconsin School of Engineering to get my
25 master's in engineering. This was the first

1 class that I took, which I passed. And going
2 through that process back in 2007, the amount
3 of time it took with my career it was not
4 something that I was going to be able to
5 continue. So I abandoned that. So I have
6 about five credit hours towards my master's in
7 engineering.

8 Q. Was it a class that was taken over the
9 course of a semester?

10 A. Yes.

11 Q. And what is an advanced project
12 management? What did you -- what did they
13 teach in that class?

14 A. Well, they had two levels of project
15 management. They had the initial and then they
16 had the advanced. I qualified based on my
17 education, training and experience to take the
18 advanced class. And essentially there were 20
19 of us in the class. And we ended up having to
20 go through, you know, understanding statistical
21 analysis, understanding doing something called
22 petro scales, understanding quantitative data
23 gathering, how to design a test, for example,
24 if we're going to do a test of an assembly, how
25 to design that. And then we had to write a

1 final dissertation paper, if you will, at least
2 25 pages long. I chose to write a case study
3 on a project that I had completed, which was a
4 mold, water intrusion EIFS case. And I took it
5 from initial inception of when we were
6 contacted by the client and all of the things
7 that we did in every single step all the way
8 through the actual court case where the
9 clients -- you know, the Court agreed with
10 everything that we had -- that I had done and
11 gave them the \$2.1 million that we were asking
12 for. So it was how -- it was kind of a
13 textbook on how to take -- this is a
14 construction defect case, how to take a
15 construction defect case from the initial call
16 all the way through to completion. And I
17 received an A on it. So how to project manage,
18 if you will, that type of a process.

19 Q. And other than this one advanced project
20 management class at the school of engineering,
21 did you -- after you completed that one class,
22 you stopped?

23 A. Yes.

24 Q. Okay. Did you take this course remotely,
25 i.e., by Internet, or did you travel to the

1 University of Wisconsin and actually sit in a
2 classroom to take the class?

3 A. It was remote, yeah.

4 Q. Which University of Wisconsin was this
5 through?

6 A. School of engineering is at
7 Platteville [sic].

8 Q. Platteville?

9 A. Yeah. That was one of the other issues,
10 is once I moved beyond, I think, the first
11 year, then I would have had to actually go to
12 the campus and begin attending some of the
13 onsite stuff, and that wasn't going to work
14 with my calendar.

15 Q. Okay. Is the only college or secondary
16 education degree that you have the Bachelor of
17 Arts in English that you have from Hamline
18 University?

19 A. Yes.

20 Q. Do you have an architecture degree?

21 A. No.

22 Q. Do you have an engineering degree?

23 A. No.

24 Q. Do you have any kind of a science degree?

25 A. No.

1 Q. Do you have a math degree?

2 A. No.

3 Q. Do you have a construction degree --

4 A. I worked --

5 Q. -- from a college?

6 A. I've worked in the field of construction
7 since I was 13 years old. So based on my
8 education, training and experience in the field
9 of construction and my qualifications that the
10 courts have looked at, I'm more than qualified
11 to give you any opinion you want on the field
12 of construction.

13 Q. Okay.

14 A. So --

15 MR. TAYLOR: Object to the
16 responsiveness --

17 THE WITNESS: I do not have a
18 degree.

19 MR. TAYLOR: Object to the
20 responsiveness of the answer.

21 BY MR. TAYLOR:

22 Q. Thank you. So you don't have a degree in
23 construction design or construction defect
24 investigation or anything along those lines, is
25 that correct?

1 A. Well, there's no such degree available.

2 Q. Okay. So the answer to my statement is
3 correct?

4 A. That is correct. I have a -- if you look
5 on my -- buried in my CV, I have two six-month
6 classes that I took at a technical school back
7 in the late '80s. One is in architectural
8 design and blueprint, so drafting and design
9 where you learn how to design and draw an
10 entire building. And then the other is in
11 estimating, doing material takeoffs and
12 estimating. So both of those are certificate
13 classes that I took at a technical college.

14 Q. Did you receive a degree in connection
15 with any of those two classes?

16 A. No. They're just a six-month class.

17 Q. Now, when you say they were a six-month
18 class, was it six months every day, or was
19 it --

20 A. Three times a week.

21 Q. Three times a week?

22 A. Yeah.

23 Q. Do you have any science degree?

24 A. No.

25 Q. Are you a licensed professional engineer?

1 A. You've asked that question. No.

2 Q. No. I asked if you had an engineering
3 degree.

4 A. No.

5 Q. If we go back to page 1 of your CV, it
6 lists your licenses and certifications?

7 A. Yes.

8 Q. Okay. And the first one says State of
9 Minnesota building official?

10 A. Yes.

11 Q. And you received that initially in the
12 year 2006?

13 A. Yes.

14 Q. Okay. And is there -- is that for all
15 types of structures, or is that restricted to
16 residential?

17 A. The one that I have is restricted to
18 residential in the sense that I could serve as
19 a building code official for residential. I
20 can inspect commercial buildings under the
21 supervision of a CBO. And "under supervision,"
22 what that means is -- it doesn't mean that they
23 have to come and be in the room with me or
24 follow me. They would say: Go down to the
25 McGregor [sic] Geer law offices, they are

1 renovating, and I need you to do the following
2 inspections for me. I would be their eyes
3 essentially at that point in time.

4 Q. You don't have a license to go out as a
5 building official on your own without the
6 supervision of a commercial building inspector
7 in order to inspect a commercial structure, is
8 that correct?

9 A. Yes. So anything that is over four
10 stories. So, for example, the buildings that
11 are here because they're an R1, these hotels, I
12 could inspect those in the state of Minnesota,
13 complete, ground up.

14 Q. And what does a building official do?

15 A. Building official enforces the code, the
16 minimum requirements within the building code.

17 Q. So you -- so then as a building official,
18 what you would do is go out to a building that
19 your license allows you to inspect, and you
20 would -- the purpose of the inspection would be
21 to determine whether there are any code
22 violations?

23 A. Well, that's -- are we talking about a
24 building that's being constructed, or are we
25 talking about a building that's already

1 finished or occupied?

2 Q. All right.

3 A. Because those are different inspections.

4 Q. Okay.

5 A. Yeah.

6 Q. Then let's talk about a building that's
7 already in existence. Is that what the purpose
8 would be, is to go perform an inspection in
9 order to identify building code violations?

10 A. That would be a property maintenance and
11 housing inspector, which I am certified to do
12 by the International Code Council. So, yes, I
13 could go out and perform an inspection on an
14 existing building and note that, you know, the
15 grab bar in the bathroom isn't stable enough
16 for somebody to get off of, you know, the
17 toilet if they needed to, the door swings too
18 quickly and it's going to pinch somebody's
19 finger, so the closer needs to be fixed on that
20 particular door. I mean, it literally is a
21 maintenance thing. I could look at the
22 exterior and say: Yeah, this exterior looks
23 like crap. It needs to be repainted. And I
24 could cite the building if the municipality
25 actually follows the property maintenance code.

1 Some of them don't. Some don't adopt it. So
2 that would be for existing buildings.

3 Existing buildings would also fall under
4 any remodel or repair that's going to be done.
5 So if a roof is going to be put on an existing
6 building, I could inspect that. If air
7 conditioners are going to be, you know,
8 replaced, I could inspect that. If somebody's
9 going to gut part of it and remodel it, I could
10 inspect that.

11 Q. Okay.

12 A. Yeah.

13 Q. Well, the State of Minnesota building
14 official license or designation that you have,
15 what does that allow you to do?

16 A. It basically allows me to inspect
17 anything.

18 Q. And then do what? I mean, are you looking
19 for anything in particular, I guess?

20 A. Well, yeah, you're looking for a -- you're
21 looking for a violation of the code. You're
22 looking to say: This is not compliant with the
23 code. And so I would red tag that, and I would
24 basically then require them to correct that, a
25 correction order effectively.

1 Q. Do you have an agreement with any
2 governmental entities to serve as a building
3 official?

4 A. No.

5 Q. Have you ever?

6 A. I have worked with the City of Minneapolis
7 in two occasions to inspect two structures
8 where the contractor had done defective work,
9 the City got pulled in, and they asked me to
10 come in and effectively work with both the
11 City, the contractor and the owner to work
12 through a way to fix it without tearing
13 everything back out again. So, yeah -- I mean,
14 it's not -- that wasn't a formal agreement.
15 They called and said: Hey, would you -- and
16 they paid me to do this -- would you come in
17 and arbitrate this for us essentially.

18 Q. So the City of Minneapolis paid you to do
19 this?

20 A. Yes. Yeah. But I don't have any
21 contracts with any municipalities or any of
22 those kinds of things.

23 Q. As a building official in order to go into
24 a structure and cite them for a code violation,
25 do you have to be actually working for a

1 governmental agency in order to do that?

2 A. Oh, absolutely. Or contracted by. And so
3 in this particular situation, in this case, I
4 can't enforce the building code. I can
5 interpret the code, but I can't enforce it.

6 Q. How often do you have to renew your status
7 as a building official?

8 A. It's a two-year cycle.

9 Q. Okay. And every two years what do you
10 have to do?

11 A. I have to have 36 hours of classroom.

12 Q. Over the two-year period?

13 A. Yeah.

14 Q. And do you have to take any testing in
15 order to maintain your status as a State of
16 Minnesota building official?

17 A. No. As long as you maintain your CEUs,
18 you don't have to.

19 Q. Okay. In order to obtain your status as a
20 Minnesota building official, did you have to
21 take a course?

22 A. Well, it's more complicated than that.
23 The first thing you have to do is apply. And
24 the application process is a point system. So
25 you essentially fill out, you know, lengthy

1 paperwork, affidavits, references, and then you
2 list your experience. And based on a point
3 system, you have to -- I think it's 200 points
4 you have to at least achieve before you can sit
5 for the class even. So, for example, if you
6 are a P.E., you get 50 points automatically.
7 So I scored, you know, 300-some points. I had
8 more than enough points based on my education,
9 training and experience to then sit for the
10 40-hour class.

11 Q. Is that 40-hour class, is it just
12 condensed into one week, you start on Monday
13 morning and you end on Friday or --

14 A. Yep. Monday morning, end on Friday. And
15 you literally go through and learn how to
16 become a code official and how to interpret the
17 code. And then three months later I sat for an
18 eight-hour test, which I passed.

19 Q. Okay. So you have to go through the
20 application process in order to be able to take
21 the 40-hour class --

22 A. Yes.

23 Q. -- then you take the 40-hour class --

24 A. Yes.

25 Q. -- condensed into actual one week --

1 A. Yes.

2 Q. -- it's not a couple of hours sprinkled
3 out over a period of time?

4 A. Correct.

5 Q. And then after that, you take an
6 eight-hour exam?

7 A. Correct.

8 Q. Which I assume you passed?

9 A. I did, yes.

10 Q. Okay. Are there any other requirements
11 besides the application process, the 40-hour
12 class and the eight-hour exam to become a code
13 official -- a building official? Excuse me.

14 A. No.

15 Q. Okay. Next item on your licenses and
16 certifications, it says International Code
17 Council residential building inspector. And
18 you've got a B1 certification?

19 A. Yes.

20 Q. Is that a number, or is that a type of
21 certification?

22 A. It's just a type.

23 Q. Okay. What does B1 stand for?

24 A. Building 1, which means residential, yeah.

25 Q. And you obtained that in 2008?

1 A. Yes. And then I have to provide -- I
2 think it's six hours a year of class time to
3 maintain that certificate. Luckily the stuff I
4 do for the state just transfers over, so --

5 Q. That was going to be my question. It
6 doesn't have to be a separate six hours --

7 A. No.

8 Q. -- it's part of what you do to maintain
9 your status as a building official?

10 A. Correct.

11 Q. Fair enough. In order to obtain your B1
12 certification as a residential building
13 inspector from the International Code Council,
14 what are the requirements to -- just to obtain
15 it?

16 A. Well, I'll tell you what I did, and then
17 you can -- I mean, I basically ordered the
18 books, I studied them, and then I went to a
19 testing facility and took the test.

20 Q. How long is that test?

21 A. It took me three hours, and I passed.

22 Q. So there's no actual class that you have
23 to sit through?

24 A. No.

25 Q. You just take the three-hour test, get the

1 certification, and then you need to do six
2 hours a year after that in order to maintain?

3 A. Yes.

4 Q. And what does the B1 certification allow
5 you to do as a -- for the -- as an
6 International Code Council residential building
7 inspector?

8 A. It doesn't necessarily allow me to do
9 anything. It simply beefs up my résumé and
10 credentials so that if I wanted to go and knock
11 on the door of the City of Birmingham if they
12 had an opening for a building code official,
13 this would be something that they would look at
14 to say: Okay. How much experience does this
15 person have? That's really all it is, yeah.

16 Q. Something to put on a résumé, more or
17 less?

18 A. Sure.

19 Q. The next item says International Code
20 Council property maintenance and housing
21 inspector, a certification 64, is that correct?

22 A. Number 64, yes.

23 Q. Okay. And what -- is that your
24 certification number, or is that a type of
25 certification?

1 A. No. That's my certification number.

2 Q. So are you the 64th person to get this
3 certification?

4 A. No. I'm certainly -- I'm pretty sure I'm
5 not, but maybe I am. I don't know. I've never
6 even looked at that.

7 Q. And you received that in 2008?

8 A. Yes.

9 Q. And what is -- what does a -- property
10 maintenance and housing inspector, what does
11 that certification allow you to do?

12 A. Well -- so there's -- in the building code
13 there are about ten different building code
14 books. Okay. One of those that's very --
15 isn't used very often is called the property
16 maintenance code. There is actually a building
17 code for maintaining property. And this speaks
18 specifically to that. And it outlines and
19 details an inspection process that a property
20 maintenance inspector for a city -- Minneapolis
21 has a property maintenance -- they have adopted
22 the property maintenance code. So, for
23 example, we had a large fire here yesterday in
24 Minneapolis on a homeless shelter that used to
25 be a hotel, The Drake Hotel. And I would

1 anticipate that as part of the investigation on
2 that fire, somebody's going to be digging into
3 the property maintenance inspection records
4 that were done by the City to find out what
5 happened, was there -- or were there work
6 orders that were put out there by the property
7 maintenance inspector who said: Hey, you need
8 to take care of this and this and this because
9 it's a fire hazard. All right. So that's what
10 property maintenance people do. It's actually
11 a nice certificate to have because it kind of
12 dovetails a lot of the inspection work that we
13 do already and we're doing and have been doing
14 for years in terms of what we look for in a
15 building.

16 Q. And what did you have to do in order to
17 obtain the property maintenance and housing
18 inspector certification?

19 A. Basically the same thing as I did for the
20 residential building inspector certification.

21 Q. Got the books, studied, took the test and
22 got the certification?

23 A. Yep.

24 Q. Are there any requirements to maintain
25 that certification?

1 A. Same -- the same hourly requirements.

2 Q. And the six hours that you take, is it all
3 part and parcel whatever for your -- to
4 maintain your status as a Minnesota building
5 official, all those classes will count toward
6 keeping that certification?

7 A. Yes.

8 Q. Next item says International Code Council
9 professional member. What does that mean?

10 A. That just means that that -- let's see.
11 Just a second. That just means in 2007 and '08
12 I joined as a professional member, which I'm
13 allowed to do as a code official. I didn't
14 keep that membership up. I just -- it
15 wasn't -- there's no benefit to it cost-wise
16 for me to do that.

17 Q. But it was just something -- it was an
18 organization you joined and then allowed it to
19 lapse?

20 A. Yeah. It's the ICC Code Council. I mean,
21 it -- the ICC Code Council jurisdicts [sic] all
22 of the codes for every state. So as a
23 professional member, I basically had access to
24 a better price point ordering code books and
25 code updates and other reports that I wanted.

1 As a corporate member, I got the same, but all
2 of my other people on staff also had access to
3 it. So that's why we switched to the corporate
4 membership.

5 Q. And then the -- so the corporate
6 membership as opposed to being a professional
7 membership, corporate membership is your
8 company?

9 A. But I have to be a CB -- I have to have --
10 I have to have a license or have at least taken
11 one of the certification classes to be a
12 corporate member.

13 Q. Or at least --

14 A. So you wouldn't -- you, I don't believe,
15 could go out and join as a corporate member.

16 Q. I understand.

17 A. All right?

18 Q. Is it you personally or just someone
19 within your organization has to have that
20 license?

21 A. Someone has to. It happens to be me. We
22 have other -- I have other code officials now
23 on my staff who could also do that, yeah.

24 Q. And then the Insurance Appraisal and
25 Umpire Association member and certified

1 appraiser/certified umpire, is that a
2 couple-of-day course that you took?

3 A. Yes. It was taught by two attorneys. One
4 represented the insurance industry and one
5 represented Plaintiffs' Bar. And it was
6 essentially the nuts and bolts of acting --
7 doing appraisals as a -- either an appraiser or
8 as an umpire. You saw in my CV I've done -- I
9 think I've done over 1,500 appraisals. And
10 they covered, you know, the legal aspects, the
11 case law at the time, which is always changing,
12 and really what appraisers should do and what
13 umpires should do in the appraisal process.
14 And then there's a test. You could just do the
15 appraiser or the umpire. I decided to take
16 both tests, so...

17 Q. And what's involved in that test?

18 A. I think it was a hundred-point test, but
19 essentially just covering what was in the
20 class, and then asking you to, you know,
21 remember that, regurgitate it.

22 Q. When you say "a hundred-point test," is
23 that a hundred questions or --

24 A. Yes.

25 Q. So each test was a hundred questions?

1 A. Yes.

2 Q. And you did that over the span of what
3 period of time?

4 A. Two days.

5 Q. So you took two days of courses and that
6 included the tests or two days of courses plus
7 the test?

8 A. You take the -- you're in class -- I
9 believe it was about six, seven hours, and then
10 they give you the test at the end. So -- and
11 this has since been renewed into 2022, I
12 believe.

13 Q. And then what's involved in maintaining
14 that certification?

15 A. A check.

16 Q. So once you get it, all you have to do is
17 send in your check in order to maintain it?

18 A. Exactly.

19 Q. There's no further education required?

20 A. No. Well, there's no education required,
21 but as part of the association you do receive a
22 newsletter, you do receive updates, you know,
23 the changing dynamics. So, for example, all of
24 a sudden a state that wasn't a matching state
25 is now a matching state because of a -- you

1 know, some case law that changed or all of a
2 sudden the appraisal process in the state of
3 Colorado has changed dramatically because of
4 some things that have happened out there.
5 These are the kinds of things that the
6 association brings to the table. Can appraisal
7 panels deal with causation? Depends on the
8 state. All right. Can they deal with matching
9 issues? Depends on the state. So -- and these
10 are the kind of things that they keep you
11 appraised of.

12 Q. Okay. So by virtue of getting that
13 newsletter, you're able to keep up --

14 A. Well, if you read it --

15 Q. -- with the states, if you read it?

16 A. If you read it, which I do. I'm a
17 veracious reader of this stuff.

18 Q. Okay. What is a Metro Skywarn spotter?

19 A. I'm a trained weather spotter with NOAA.
20 So I have an ID number. In a perfect
21 situation, if I'm driving my car out in the
22 country on a summer day and I see an anvil
23 cloud turning into a wall cloud, they would
24 like me to be that guy that pulls over to the
25 side of the road and phones in what's occurring

1 and stay there the entire time until I see the
2 funnel cloud, if it does develop, until I see
3 the hail that falls, measure the hail, look at
4 a debris field afterwards, determine wind
5 speeds, wind direction, those kinds of things
6 based on the debris field, the size of branches
7 and the collateral damage to buildings. I'm
8 not a storm chaser. I value my life too much
9 for that, but I certainly could do that.

10 That's really what the class is. It also
11 teaches you how to utilize the NOAA website and
12 the NOAA -- what's called the SWDI, the storm
13 inventory data, severe weather inventory data.
14 And NOAA publishes two types of reports. They
15 publish a pre-storm report. These are the
16 warnings, the watches. After they then publish
17 after action reports where they list what
18 really occurred. Typically that information is
19 gleaned from weather spotters, law enforcement
20 or from -- they call it the general public.

21 Q. And, for example, if there was a tornado,
22 which you're talking about the -- after the
23 storm, they would put together kind of a grid
24 or a map that would show the path of the
25 tornado and how strong the tornado was from --

1 is it EF? Is that right?

2 A. Yes.

3 Q. EF0 on up to, whatever --

4 A. Yeah.

5 Q. -- EF5 or whatever, is that right?

6 A. Correct. Correct.

7 Q. Is there any kind of a test that you had
8 to take in order to become a Skywarn spotter?

9 A. Yes. This is again an eight-hour day,
10 full eight-hour day with a test included at the
11 end. I think the test took 45 minutes.

12 Q. And that's part of the eight hours?

13 A. Yes.

14 Q. So really seven hours of class time?

15 A. Yes.

16 Q. And once you obtain your ID number as a
17 spotter, what do you have to do in order to
18 maintain that?

19 A. Nothing. You're done at that point.

20 Q. Okay. And then the next item says you're
21 a certified vinyl siding installer?

22 A. Yes.

23 Q. And you got that in 2015?

24 A. I did.

25 Q. And what do you have to do in order to

1 become a certified vinyl siding installer?

2 A. Well, again, you sit for an eight-hour
3 class, you learn all of the aspects of vinyl
4 siding from its origin inception to where it is
5 today, all of the issues and problems with
6 vinyl siding. You learn about
7 weather-resistive barriers and window flashing
8 and drainage plains and drainage envelopes and
9 integrating vinyl siding and different products
10 and essentially the warranties and the
11 installation details and then the defects, what
12 do you look for for a defective installation.

13 Q. Did you have to take a test?

14 A. Again, yes, at the end another, you know,
15 45-minute test, something like that.

16 Q. And once you are certified as a vinyl
17 siding installer, what do you have to do in
18 order to maintain that certification?

19 A. That's all you do is you take it. It's a
20 one-time -- one-time deal, so...

21 Q. You don't have to send them a check every
22 year or every --

23 A. No.

24 Q. -- other year?

25 A. No.

1 Q. Okay. And then finally the last
2 certification here is a certified renovator
3 lead safety?

4 A. Lead.

5 Q. Lead. Excuse me.

6 A. Yeah.

7 Q. And what exactly does that certification
8 do for you?

9 A. Well, it should say lead and asbestos. So
10 this is a -- this is a one-day active working
11 class where you -- you actually build a
12 containment, you -- you remove asbestos and you
13 remove lead in a Tyvek suit in a -- you know,
14 with air, oxygen tanks and you remediate it.
15 So you go through the entire process of not
16 only identifying that it's lead or asbestos,
17 but then you also go through the process of
18 remediating it. And it's -- it's actually a
19 requirement for building code officials to go
20 through this class in the state of Minnesota.
21 It's now a requirement for contractors to also
22 go through that class to maintain their
23 licenses. We want people to work safe and we
24 want people to make work smart. So in other
25 words, I could go into -- I haven't been asked

1 to do this, but I could go into this project
2 and I could design a protocol for lead safety
3 abatement and for asbestos abatement.

4 Q. Okay. And this is a one-day interactive
5 class, I think is what you said, where you
6 build and then remediate, right?

7 A. Yes.

8 Q. Is there any kind of a test at the end?

9 A. Yes. Absolutely. Yeah.

10 Q. And what is the test, is it -- or are you
11 just graded on the build and the remediation?

12 A. No. There's actually a written test
13 afterwards as well.

14 Q. And that's all part of the same day?

15 A. Yes.

16 Q. And then once you've obtained that
17 certification, what is necessary in order to
18 maintain that certification?

19 A. It's a one-time -- one-time deal, yeah.

20 Q. So, again, you don't have to send any
21 checks or anything after that; once you've
22 obtained it, you have it?

23 A. Correct.

24 Q. I noticed in looking at it it says 2015 to
25 2022. Is there a reason --

1 A. I don't know why that's on there. That's
2 a misprint. I don't know what that is. So
3 there's nothing -- nothing there.

4 Q. You had mentioned in an answer that
5 building officials and contractors have to go
6 through this class, the certified renovator --

7 A. Yes.

8 Q. -- lead and asbestos safety in order to
9 keep their licenses?

10 A. Yes.

11 Q. Okay. Are you a licensed contractor?

12 A. No.

13 Q. Have you ever been a licensed contractor?

14 A. Yes.

15 Q. Is -- when did you have a contractor's
16 license?

17 A. From 1980 -- I think it was '88 or '89 to
18 2000.

19 Q. Is that in the state of Minnesota?

20 A. Yes.

21 Q. Why are you not a licensed contractor?

22 A. We're going to go there today, huh?

23 Q. Just asking questions, sir.

24 A. Yeah. My license was revoked in 2000 as a
25 result of a bankruptcy that my firm went

1 through when we acquired another business
2 called House of Dreams, LLC. And based on the
3 fraudulent transaction that occurred with the
4 purchase of that business, it caused an
5 81-year-old family business to file for
6 Chapter 7 bankruptcy in 2000, which then led to
7 losing my license.

8 Q. Okay.

9 A. Yep.

10 Q. What was the fraudulent transaction that
11 you're talking about?

12 A. Let's see. They built ten --

13 Q. Who is "they"? I'm sorry.

14 A. House of Dreams, LLC. They built ten
15 EIFS/stucco houses that all had major water
16 intrusion and mold issues. And through a lack
17 of due diligence on my part, I didn't recognize
18 that when I purchased their business, I also
19 purchased that trailing liability. They did a
20 great job of flushing all of their liability
21 over to me. So don't hire me to buy and merge
22 a business. I got my ass handed to me pretty
23 easily. There's a whole bunch of other
24 underlying issues over and above that. They
25 had a kitchen showroom that had licensing

1 agreements with Kohler, Sub-Zero, three major
2 cabinet manufacturers to distribute their
3 cabinets. Once we got into the agreement, we
4 found a month into the agreement that they had
5 never re-signed any of those, so none of those
6 existed. We had to renegotiate all of those
7 deals at a higher price point. Do you want me
8 to continue?

9 Q. Sure.

10 A. We took on what was on paper a \$3 million
11 book of business. They had taken ten percent
12 down on those, so roughly \$300,000. That was
13 all to be placed in an escrow account to be
14 paid to subcontractors as the jobs got started.
15 They never did that. They kept that money. So
16 subcontractors didn't get paid causing
17 complaints obviously. For the very first time
18 in 81 years, we had liens filed on projects
19 that we never had happen before. We always
20 paid our subs. And then the \$3 million book of
21 business that we took on, as soon as we got
22 started on it, my senior project manager came
23 in, there were eight jobs, and he said that
24 \$3 million worth of business should have been
25 sold for six. So we were upsidedown

1 \$3 million. That's how far they had undersold
2 it. And we had all that liability. So it took
3 us less than six months to go out of business.
4 That triggered a lack of a payment then on
5 insurance, couldn't pay my general liability
6 insurance. And that triggers an automatic
7 notice from the insurance carrier to the State.
8 If you don't make your insurance payment, and
9 that was December of that year, of 2000, then
10 the State automatically shuts you down, takes
11 your license. So that's what occurred.

12 Q. So when you say your license was revoked,
13 was it revoked -- the State came in and
14 basically said: You're not keeping up with
15 your insurance, your upsidedown and --

16 A. Well, yeah. And then there are
17 complaints. I mean, with a bankruptcy there's
18 complaints. Employees complained that they
19 didn't get paid, which they didn't.

20 Subcontractors complained that they didn't get
21 paid, which they didn't. We had projects that
22 were in process. Imagine if your kitchen was
23 half done and, you know, it's January --

24 December 15th and your contractor doesn't show
25 up, you're going to be kind of pissed. So

1 consumers complained. And those complaints all
2 led to the revocation of the license.

3 Q. Was there some kind of a proceeding that
4 was brought against you, or is this just the
5 State approached you, said: We've got a
6 problem --

7 A. No. There's an administrative -- there's
8 an administrative action that they took, yeah.
9 Now, it's important to note that the Department
10 of Labor and Industry is the one that controls
11 contractor licensing. So the department that
12 essentially revoked my contractor's license is
13 the same department that also then turns around
14 and grants me, what, five, six years later --
15 all of this had to be put into affidavit. So
16 the same department allows me then to sit for
17 and take the contractor licensing. So clearly
18 any differences I had with the Department of
19 Labor and Industry have well been vetted out as
20 a result of that.

21 Q. Have you attempted to obtain your
22 contractor's license again since it was
23 revoked?

24 A. No, there's no reason to. No.

25 Q. What is it that you have -- you're a

1 licensed contractor or you were a licensed
2 general contractor until 2000?

3 A. Licensed general contractor, class A,
4 which meant I could do commercial and
5 residential.

6 Q. Got it.

7 A. We were a design-build firm. We had 75
8 employees and we did some pretty high-end
9 stuff.

10 Q. Okay.

11 A. Yeah.

12 Q. Are you an industrial hygienist?

13 A. I am not. I've worked with them and have
14 worked with them for the last 30 years. But
15 no, I'm not.

16 Q. Do you have anybody within your company
17 that is an industrial hygienist?

18 A. No. I have two people in my company that
19 are -- have degrees in environmental science
20 and -- but they are not industrial hygienists,
21 yeah.

22 Q. I take it that means then you're not a
23 certified industrial hygienist either?

24 A. That is correct.

25 Q. Do you have any training as an industrial

1 hygienist?

2 A. Field training is all, working hand in
3 hand with industrial hygienists, yes --

4 Q. Have you ever --

5 A. -- sampling side by side with industrial
6 hygienists.

7 Q. Have you ever heard of the American Board
8 of Industrial Hygiene?

9 A. Yes.

10 Q. Do you agree that the American Board of
11 Industrial Hygiene sets the education and
12 experience standards for industrial hygienists?

13 A. Absolutely. I wish they would add a few
14 criteria, though, that is sorely missing in
15 that education.

16 Q. Do you meet the requirements of the
17 American Board of Industrial Hygienists [sic]
18 to be considered an industrial hygienist?

19 A. I've already said I'm not, no.

20 Q. No, I didn't ask --

21 A. I'm not an industrial hygienist. I
22 don't --

23 Q. Do you meet the requirements?

24 A. I do not meet any of those requirements.

25 Q. Are you a microbiologist?

1 A. No.

2 Q. Do you have any specialized science
3 training or credentials in sampling?

4 A. No, just field experience.

5 Q. Do you have any specialized science
6 training or credentials in analysis of mold or
7 soot?

8 A. Just field training and working with
9 industrial hygienists.

10 Q. Are you aware that there are some states
11 out there that have licensing requirements for
12 mold consultants?

13 A. Yes.

14 Q. Do you know whether Alabama is one of
15 those states?

16 A. I'm not sure.

17 Q. Are you a licensed mold consultant in any
18 state?

19 A. No.

20 MR. CONCHIN: Are you still there?

21 MR. TAYLOR: Yeah, still here, Gary.

22 BY MR. TAYLOR:

23 Q. Other than the revocation of your general
24 contractor's license by the State of Minnesota,
25 have you had any other complaints lodged

1 against you with regard to any licenses or
2 certifications that you have?

3 A. No.

4 Q. And you are the owner of Forensic Building
5 Science --

6 A. Yes.

7 Q. -- is that correct? And how many
8 employees does Forensic Building Science have?

9 A. As I sit here today, I think it's 16. I'm
10 not sure.

11 Q. 16 as in 1-6 or 60 as in 6-0?

12 A. 1-6, 16. The reason I'm not sure is we
13 have an operation in Puerto Rico, and we have a
14 number of employees who live in Puerto Rico,
15 and I know we're in the midst of shutting that
16 down, so I'm not sure where they sit in that
17 mix. If those are included, then it's about 26
18 people, so...

19 Q. Was the Puerto Rico operation as a result
20 of the hurricanes --

21 A. Yes. Absolutely. Yeah.

22 Q. And that has basically now run its course?

23 A. No, it hasn't run its course. The
24 inspection work, I think we have nine reports
25 that are still left to finish up along with

1 estimates. We will have done a total of about
2 a hundred. And these are all, you know, large,
3 you know, 20, \$30 million condo cases. They're
4 huge. So -- but -- so that part is done. Now
5 we're moving into the what are called technical
6 meetings with the other side, mediations. It's
7 a little different way to do business down
8 there than it is here. So there will be
9 another year's worth of negotiations that we'll
10 be involved in.

11 Q. Understood. Does -- and is it okay if we
12 just call Forensic Building Science -- just for
13 ease today, just call it FBS?

14 A. Please.

15 Q. Okay. Is that how you -- pretty much how
16 you refer to it?

17 A. Yes.

18 Q. Very good. Does FBS have any licensed
19 contractors in its employment?

20 A. Frank Martin, who is on our staff, he just
21 joined us about six months ago. He was the
22 head building code official for one of our
23 large suburban cities here for 18 years. And
24 he just left government to join us. And he --
25 I believe he does still carry a license also as

1 a contractor, yes.

2 Q. Are you sure of that, or you just think
3 that that's probably the case?

4 A. Yeah, I'm pretty sure. Yeah, pretty sure
5 of that. I know he -- yeah, he does because he
6 sat -- he had to re -- he had to retake the
7 contractor licensing test because he had let it
8 lapse. And I know he took that test back in, I
9 want to say, September or October and passed
10 it, so yes.

11 Q. Okay.

12 A. Yeah.

13 Q. You had mentioned that the report that
14 we've marked as Exhibit 32 for identification
15 was jointly authored by you and Brian Johnson?

16 A. Yes.

17 Q. Is Brian Johnson still employed by FBS?

18 A. No. Brian works as a subcontractor for us
19 now. In fact, we just finished doing the --
20 all of the school districts in Port Aransas,
21 Texas, all of the school districts in Victoria,
22 Texas and all of the county buildings in Nueces
23 County, Texas as a result of Hurricane Harvey.
24 So I think in total it's about 200 different
25 site locations that he has worked on that with

1 me.

2 Q. Do you still have a relationship then with
3 Mr. Johnson?

4 A. Yes, very much so.

5 Q. How long -- when did his role switch from
6 being an employee of FBS to becoming a
7 subcontractor?

8 A. Well, when he left our employment; which I
9 think this might have been the last case he
10 worked on when he was still employed with us.

11 Q. So that would be, what, 2015?

12 A. Yeah, 2015. He went back into the design
13 world. He's a structural engineer. So he went
14 back into designing hotels and schools and did
15 that for a couple of years, and then didn't
16 like that and called and said he wanted to get
17 back into this kind of work. And so we began
18 to utilize him as a subconsultant.

19 Q. When did you start utilizing him as a
20 subcontractor?

21 A. I'd say couple years ago, yeah.

22 Q. 2017?

23 A. Yeah, probably '17.

24 Q. So after about a two-year period, you
25 started using him as a subcontractor?

1 A. Yes.

2 Q. Does Mr. Johnson have his own company?

3 A. He does.

4 Q. What's the name of that company?

5 A. I think it's just Brian Johnson, P.E.

6 Q. Do you know in which states Mr. Johnson
7 has his professional engineering licenses?

8 A. I know for a fact that he has let it lapse
9 in Alabama because we have a large project in
10 Birmingham that we are going to be bringing him
11 into. So he's reapplying to get that
12 reinstated, which is a formality. And -- but I
13 believe it's about 30 states that he's licensed
14 in.

15 Q. Did Mr. Johnson ever inspect the Knights
16 Inn?

17 A. I don't know if he did or not. He's not
18 listed on here, but I thought he had been to
19 this one, but I don't know.

20 Q. Who were -- could you list all of the
21 employees at FBS who were involved in either
22 the fire claim or the wind claim? Obviously
23 there's Mr. Johnson, who is no longer an
24 employee, and there's you --

25 A. Correct.

1 Q. -- but beyond that, who else?

2 A. So Jim Irmiter, my son, Adam Peiro,
3 P-e-i-r-o. And those are the two people on
4 our -- and -- I'm sorry. And a third one, Ryan
5 Neirengarten. And --

6 Q. Could you spell that, please.

7 A. N-e-i-r-e-n-g-a-r-t-e-n. And Ryan is no
8 longer an employee with us.

9 Q. When did Ryan leave?

10 A. He left about eight months ago.

11 Q. Do you know why he left?

12 A. We let him go, yeah.

13 Q. What did Ryan do for you?

14 A. He --

15 Q. I guess you said you let him go. He was
16 fired?

17 A. Yeah. Yeah, he -- he did field
18 inspections, wrote reports. Ryan, Jim and Adam
19 all have degrees in environmental science with
20 training in sampling. So he was one of our
21 field inspectors.

22 Q. Was there a particular type of damage that
23 Mr. Neirengarten would look at and order as one
24 of your field inspectors?

25 A. Well, in this case he simply would have

1 reviewed reports. That's all. So are you
2 asking what he would have done on this or in
3 general what he does?

4 Q. In general.

5 A. In general? I know he -- we had put him
6 through Haag certification. So he was -- he
7 was -- he had gone through those classes. So
8 he was able to inspect almost anything for us
9 from a construction defect. He could do
10 moisture probing. He could do infrared. He
11 could do sample gathering for particulate or
12 for mold. He could draft reports. Couldn't do
13 estimates, did not do Xactimate. Adam and Jim
14 are both trained to do that. Yeah, that was
15 about it. Yeah.

16 Q. And did Mr. Neirengarten ever visit
17 Knights Inn?

18 A. No.

19 Q. So his role in connection with the wind
20 and fire claims that we're dealing with today
21 was simply to review reports?

22 A. It may have been. He's not listed on here
23 as a signator. At the time he worked for us,
24 it wouldn't have been unreasonable for him to
25 have put eyes on this. The only reason his

1 eyes would have been on there were to look at
2 formatting issues, look at spelling kinds of
3 things. That would have been it, so...

4 Q. So there would not have been any
5 substantive work that he was involved in?

6 A. No. He might have -- because I know
7 Brian -- I know Johnson did the -- this tornado
8 map. He might have done the entry of -- so the
9 inspection observations, section 2.19, which is
10 literally right out of the field notes, it's
11 transposed, he might have done that work. He
12 might have taken that and put it in.

13 Q. But there's nothing involved other than
14 transferring from one source into the report,
15 is that correct?

16 A. Correct. There's no -- there's no opinion
17 being given, yeah, just putting those facts in.

18 Q. It's like me taking some notes and copying
19 them over, when I was in college, I would copy
20 them over much more neatly type of deal?

21 A. Exactly.

22 Q. And what was Mr. Peiro's involvement in
23 either of the two claims?

24 A. He did sampling, some of the sampling for
25 the fire claim. He did -- he took photos for

1 some of the wind claim. He is in some of the
2 photos in the wind claim. I mean, you can see
3 his finger lifting up, you know, seams and
4 documenting some conditions. So he would have
5 been involved in both of those. He would have
6 been on the roof at night when we did infrared,
7 so...

8 Q. I noticed when I was reviewing the report
9 that it indicates that Jim Irmiter and Adam
10 Peiro were at the site in connection with the
11 wind claim from July 7 through July 9, 2015?

12 A. Yes.

13 Q. And before this report was prepared, did
14 you ever visit the site?

15 A. Yes.

16 Q. When did you visit?

17 A. I had been to the site in, I want to say,
18 June 15th. Mr. Howarth is prone to calling me
19 directly. Yeah, it's right here on the first
20 page here. I indicate June 15th, 2015. We
21 were retained by Howarth, I think, on
22 June 26th.

23 Q. Okay. So it was Charles Howarth that
24 called you?

25 A. Yes.

1 Q. Okay. On June what?

2 A. Well, he would have called me probably
3 around the end of the first week in June. And
4 we do -- we perform what are called -- I
5 perform what are called scoping visits. The
6 scoping visits are to get a general look at the
7 property, get an idea on the -- what should be
8 done there, what type of inspections are we
9 going to have to do, what kind of access. I
10 mean, do I need ladders? So I made an
11 inspection on the 15th.

12 Q. All right. Well, let's talk about that --

13 A. Yeah.

14 Q. -- inspection because you call it a, "I
15 made a brief scoping site visit on July 15..."

16 A. Yes.

17 Q. "...to establish the eventual inspection
18 protocols."

19 A. Yes.

20 Q. That's what you're talking about?

21 A. Yeah.

22 Q. So you were not actually out there doing
23 anything to make any determinations at this
24 point, you were just trying to make
25 arrangements in order for the inspections --

1 the more involved inspections to take place?

2 A. Correct. Correct.

3 Q. And had your company -- had FBS been
4 retained by the time you had made your brief
5 scoping visit?

6 A. No. But we know we were going to. I
7 mean, Chuck said: I've got a project that's
8 going to come your way. What we had to work
9 out at that point in time was price, you know:
10 What are you going to charge us to do that? So
11 part of the scoping visit would be take a look
12 at the site to determine how much it's going to
13 cost.

14 Q. Okay. And what did you charge -- I'm
15 assuming The Howarth Group took care of your
16 bills?

17 A. Yes.

18 Q. And how much did you charge in order to do
19 the inspection of the -- for the wind claim and
20 render the report that has been marked as
21 Defendant's Exhibit 32 for identification?

22 A. We do our work on a set fee basis, fee for
23 service instead of hourly. And I believe on
24 that one we charged \$5,500 plus travel and
25 hotel expenses. And we were paid in full.

1 Q. By The Howarth Group?

2 A. Yes.

3 Q. And had you also by this time already been
4 retained in connection with the fire claim, or
5 did that come at the same time?

6 A. I don't remember. But we inspected it at
7 the same time. We didn't go back to inspect
8 the fire claim. So we must have been retained
9 for both of them. I looked at both when I was
10 down there.

11 Q. So was it \$5,500 for both claims --

12 A. No.

13 Q. -- or just for the wind claim?

14 A. Just for the wind claim. I believe the
15 fire claim was 3,500 plus lab expenses. And we
16 have contracts for all of that. I mean,
17 there -- and we have all the invoices. All of
18 that is available.

19 Q. So for the fire claim it was 3,500 plus
20 travel and expenses, I guess, allocated between
21 the two?

22 A. Yes.

23 MR. LEE: About to run out of video.
24 Do you want to take a quick break?

25 MR. TAYLOR: Yep. Let's go ahead

1 and take a break then.

2 THE WITNESS: Great.

3 MR. TAYLOR: It's a good place to --
4 we're going off the record, Gary. I've been
5 told that there's only --

6 MR. CONCHIN: All right.

7 MR. TAYLOR: He has to change out on
8 the camera.

9 THE VIDEOGRAPHER: This marks the
10 end of media unit number 1.

11 We are going off the record at
12 10:39 a.m.

13 (Recess.)

14 THE VIDEOGRAPHER: This begins media
15 unit number 2.

16 We are going back on the record at
17 10:49 a.m.

18 BY MR. TAYLOR:

19 Q. Before the break, Mr. Irmiter, we were
20 talking about your brief scoping visit that you
21 made on June 15, 2015, right around the time
22 that you were retained on both the wind and
23 fire claims. When you visited the site in June
24 of 2015 for this brief scoping visit, how long
25 were you out there?

1 A. Probably about an hour and a half.

2 Q. Did you get up on the roofs while you were
3 there, or did you just kind of -- you were just
4 really out there to see: All right, what do I
5 need to do, what equipment do I need, that type
6 of --

7 A. No, I got up and looked at the three roofs
8 real quick, just walked them, looked at the
9 metal that had been displaced, spent some time
10 cruising through the interiors just looking at
11 water damage, look at the cause and origin,
12 location of the fire, some of the collateral on
13 the exterior of the building from the smoke and
14 soot, and that was about it. I had been --
15 there's a conference center right across the
16 street from there. It's a -- like a -- I think
17 it's the City of Bessemer, you know, conference
18 area. Right next door up on the hill used to
19 be a Hampton Inn. And I stayed at that Hampton
20 Inn a couple of times before on other work that
21 I'd done down in this location, but that was
22 when this was still a viable hotel. That was
23 probably 2012, 2013, because I've stayed there
24 a couple of times before. It's no longer a
25 Hampton Inn. It's changed, when I was down

1 there in 2019, to something else. But -- so I
2 was familiar with the property because it
3 looks -- here's the Hampton Inn. It looks
4 right down on it. So -- I mean, I remember it
5 before with cars and things in the parking lot.
6 But at that time I didn't tour through it at
7 all. So I just seen it.

8 Q. Is it right off a freeway?

9 A. Yeah, you kind of come off the freeway,
10 you take a left and it's -- it's -- somebody
11 else is sitting in.

12 MR. TAYLOR: Okay. Do we have
13 somebody else who is making an appearance?

14 MR. CONCHIN: Yeah, Megan is sitting
15 here while I'm dealing with the phone.

16 MS. PHILLIPS: Okay. Can you hear
17 Gary?

18 MR. TAYLOR: Only when he just --
19 what he just said, yes. He said he was dealing
20 with the phone.

21 MS. PHILLIPS: So he --

22 MR. CONCHIN: Go ahead.

23 MS. PHILLIPS: -- kind of had a
24 relevant phone call. I'm Megan Phillips. I'm
25 also an attorney of record in the case.

1 MR. TAYLOR: You got it so we can
2 continue on? Okay.

3 MS. PHILLIPS: He had me come while
4 he's answering the phone calls --

5 MR. TAYLOR: Okay.

6 MS. PHILLIPS: -- potentially about
7 his dad.

8 MR. TAYLOR: All right. Understand.

9 THE WITNESS: Thank you.

10 MR. TAYLOR: Just let us know if --

11 MS. PHILLIPS: So you can continue
12 asking.

13 MR. TAYLOR: Okay.

14 MR. CONCHIN: Go ahead.

15 MR. TAYLOR: Fair enough.

16 BY MR. TAYLOR:

17 Q. So you were at -- so your first visit was
18 for about an hour and a half, you went up on
19 the roofs briefly --

20 A. Yeah.

21 Q. -- and you went into some or all of the
22 units?

23 A. No, not all of them, just -- just -- I
24 just took a general look at the -- you know,
25 the overall spaces, and that was it.

1 Q. Did you take any notes while you were --

2 A. No.

3 Q. -- there at the first time?

4 A. No.

5 Q. Any photographs?

6 A. I took some with my phone, and my phone
7 got destroyed, so I don't have those
8 photographs, I'm sorry, otherwise they would
9 have been used in the report.

10 Q. Was anybody else from FBS with you during
11 that first visit?

12 A. No.

13 Q. Were you already down in Alabama on other
14 business --

15 A. I was.

16 Q. -- and stopped by?

17 A. Yeah. Sorry.

18 Q. Okay. You've got to wait until I finish
19 my question, please. Like I said, the hardest
20 working person in the room, you don't want her
21 annoyed with us.

22 All right. And then the -- according to
23 the report, the only other time you were there
24 was on April 24 of 2019?

25 A. Yes.

1 Q. So approximately seven, eight months ago?

2 A. Yes.

3 Q. And what was -- and the purpose was just
4 to refamiliarize yourself with the property?

5 A. Yes. It was quite shocking quite frankly.

6 Q. Well, did you do an inspection while you
7 were there?

8 A. I -- well, number 1, I didn't necessarily
9 feel safe, but I didn't do an inspection per
10 se. I think I took 12 photos. I walked the
11 property. And really that was about it.

12 Q. Did you get up on the roofs?

13 A. No.

14 Q. So you walked around the grounds?

15 A. Yes.

16 Q. And so whatever you visualized, you
17 visualized from ground level?

18 A. Yes.

19 Q. And you took about 12 photos?

20 A. Yes.

21 Q. Did you take any notes?

22 A. No.

23 Q. Was anyone with you?

24 A. No.

25 Q. So when you were down in June of 2015 for

1 your brief scoping visit, you happened to be in
2 Alabama on other business --

3 A. Yes.

4 Q. -- and stopped by because you had gotten a
5 call from Mr. Howarth?

6 A. Yes.

7 Q. Had Mr. Howarth described by this time
8 exactly what he was going to need from you-all?

9 A. Yes. He had described it to me, okay,
10 over the phone. And that would have been in
11 the first week in June. And I would have
12 indicated to him: Hey, I'm going to be down in
13 that area anyway. Let me take a look at it.
14 He sent us the actual intake form, I believe,
15 on the 23rd, 24th of June, so about a week
16 later.

17 Q. What do you mean an intake form?

18 A. Well, all of our clients whenever we have
19 a new project we ask them to fill out an
20 intake: So give us, you know, the address, the
21 name of the client, who's going to be paying
22 us, who should the agreement be made out to,
23 the type of loss, the dates of loss. And so he
24 would have sent one of those in to us.

25 Q. Okay.

1 A. Yeah.

2 Q. Fair enough.

3 A. And that's in our file.

4 Q. The April 24, 2019, visit to refamiliarize
5 yourself with the property, how long were you
6 out there?

7 A. Boy, an hour at the most.

8 Q. Are those the only two visits you made to
9 the site --

10 A. Yes.

11 Q. -- June of 2015 for about an hour and a
12 half and April 2019 for no more than an hour?

13 A. Yes.

14 Q. Have you written or authored any
15 publications?

16 MR. CONCHIN: What was that? Excuse
17 me.

18 MR. TAYLOR: I asked if he had
19 authored or written any publications.

20 MR. CONCHIN: Related to this or
21 what, just in general?

22 MR. TAYLOR: Just in general.

23 THE WITNESS: I have a bunch of
24 PowerPoints that I've done. I do
25 presentations, but --

1 BY MR. TAYLOR:

2 Q. Talking about publications.

3 A. No, nothing other than that.

4 Q. Have you personally ever been a party in
5 litigation?

6 A. Well, my divorce.

7 Q. Okay. Other than your divorce, have you
8 ever been a party individually, personally,
9 Thomas Irmiter, to any litigation?

10 A. Not that I know of. I think my company
11 might have been.

12 Q. We'll get to that in a minute.

13 A. Yeah.

14 Q. I want to know if you individually --

15 A. I don't recall.

16 Q. Okay.

17 A. I don't recall.

18 Q. And how about FBS?

19 A. No, not FBS. My -- Irmiter Contractors.

20 Q. The company where the general contractor's
21 license was --

22 A. Yeah.

23 Q. -- revoked?

24 A. As part of that -- as part of that
25 bankruptcy, a couple of clients filed lawsuits

1 against us. Those were dismissed in bankruptcy
2 court. But those are the only ones I recall.

3 Q. So no suits against you individually or
4 against FBS?

5 A. Not that I'm aware of.

6 Q. Have you -- and I need to ask this
7 question. Have you ever been convicted of a
8 crime?

9 A. No.

10 Q. Have you ever been arrested for anything
11 other than a traffic violation?

12 A. No.

13 Q. The visit that you made back at the
14 property in April of 2019, was there an
15 additional fee that you were paid in order to
16 make that visit?

17 A. No. I was in the area again.

18 Q. Did either Mr. Howarth or Mr. Conchin --
19 did somebody else know you were going to be
20 stopping by the property, or you just did it on
21 your own?

22 A. I don't recall if it was spurred by --
23 inquired by either -- and it wouldn't have been
24 Howarth, by Gary and his group or if it was
25 just serendipitous that I was in the area. I

1 don't recall, yeah.

2 Q. Were you requested to go back out and
3 visit --

4 A. No.

5 Q. -- the property? So you just happened to
6 be in the area and figured you would stop by?

7 A. Yes.

8 Q. Was there anybody out at the property when
9 you were there in April?

10 A. No.

11 Q. Have you ever had a court enter any kind
12 of an order in which you -- it refused to allow
13 you to testify as an expert witness either
14 totally or in part?

15 A. Yes.

16 Q. On how many occasions?

17 A. One.

18 Q. And in what case was that?

19 A. It was a construction defects case where I
20 was being asked to -- it was actually a
21 fraudulent concealment case.

22 Q. Okay. Explain what you mean by that.

23 A. Well, the contractor -- a remodeling
24 contractor had put a large addition on a house,
25 a stucco house, and in the process of putting

1 the addition on had found water damage. The
2 house at that point in time was eight years
3 old. We have a ten-year statute of repose in
4 the state of Minnesota for statutory
5 warranties. So he finds this damage in year
6 eight, puts the addition on, covers over all of
7 this damage and never lets the owner know about
8 it. Flash forward to three years later, now we
9 are at 11 years, so there's no statute --
10 there's no action potentially against the
11 original builder, and we go out and we inspect
12 the home and we find out that it has
13 substantial rot and water damage behind the
14 stucco from defective window installation and
15 improper installation of stucco and stone. So
16 at that point in time the case that was brought
17 was a fraudulent concealment against the
18 remodeling contractor because by not
19 identifying that issue, in year eight of
20 construction, there was no way that client
21 could go back against the original builder. So
22 the Court ruled that, because at that point in
23 time, in 2005 I think it was, I did not have a
24 license as a general contractor even though I
25 was more than qualified based on education,

1 training and experience, they were not going to
2 let me give an opinion about the duties of a
3 general contractor and responsibilities. That
4 was the ruling. And --

5 Q. What's the name of that case?

6 A. I don't -- I'm sorry. I really don't
7 remember.

8 Q. In what court was that pending?

9 A. St. Paul, Minnesota, yeah.

10 Q. What county would that be?

11 A. Ramsey probably, yeah.

12 Q. Is St. Paul in more than one county?

13 A. I think it's only one county, yeah,
14 Ramsey, yeah. My license as a building code
15 official now allows me to give that type of
16 testimony because there's a -- that's a higher
17 standard threshold bar, if you will, than a
18 contractor. And we have specific training on
19 the duties and responsibilities of licensed
20 contractors as code officials.

21 Q. What was the name of the party that
22 retained you as an expert in that case?

23 A. Briggs and Morgan law firm.

24 Q. And who was Briggs and Morgan's client?

25 A. I think it was Morrissey.

1 Q. So the party -- would that have been the
2 plaintiff?

3 A. Yes.

4 Q. And you think the plaintiff's name was
5 Morrissey?

6 A. Yes.

7 Q. Has a -- other than this Morrissey case --
8 do you remember the name of the defendant?

9 A. I don't. I don't. I will tell you that
10 as a result of that for about a six-year
11 period, certainly here in the state of
12 Minnesota, any case that I was involved in that
13 was brought up, that was brought before judges,
14 there were motions in limine, those have been
15 stricken [sic] every single time in the state
16 of Minnesota.

17 Q. What do you mean "struck"?

18 A. Well, judges have said: No, we're going
19 to let him testify.

20 Q. Okay.

21 A. Yeah. That has nothing to do with this
22 case. So, in other words, it hasn't precluded
23 me from testifying in any other cases that I am
24 aware of as a result of people bringing that
25 issue up, so...

1 Q. Well, if there had been other instances,
2 would you have expected to know about it?

3 A. Other instances of what?

4 Q. If there had been other instances where a
5 court had said that you could not, either in
6 full or in part, give expert testimony, would
7 you have expected to know about it, in other
8 words, been advised?

9 A. Well -- so let's go back and examine your
10 question because the question that you asked me
11 is did a court strike me or has one of my
12 reports been stricken. That's different in my
13 mind.

14 Q. No. I'm asking: Has a court entered
15 previously -- has a court previously ever
16 entered an order where they would not allow you
17 to testify, either in whole or in part, as an
18 expert witness? That was my question.

19 A. Well, see, then you would have to -- I
20 would have to see if the expert designations
21 had been even made. There's a case in Chicago
22 about four years ago on a church where I issued
23 a report on an ice dam claim. And the firm
24 that was working for the church, The Voss Law
25 Firm out of Texas, the -- was in disarray at

1 the time. The -- I walked into this
2 120-year-old church, met the minister at the
3 front door and did exactly what is prescribed
4 in the ASTM standards that we use for
5 inspection. The first thing I said is: Walk
6 me through and show me all of the previous
7 damage that was in this old church before any
8 of this ice damming occurred. And then walk me
9 through, and as we go, point out the new
10 damage. And third, point out any that was
11 existing before but has gotten worse as a
12 result. So I separated out all of those areas.
13 All right? Then did an analysis based on my
14 training as a weather spotter of snowfall
15 depths and the rate of ice melt. So if I've
16 got 30 inches of snow that fell in March and
17 all of a sudden the temperature went up the
18 next day to 38 degrees, and then it went down
19 to 20 degrees that night, that's going to be a
20 classic mechanism for an ice dam to occur.
21 Wrote all of that into the report. I find out
22 in a deposition two years ago that a judge
23 struck that report. A motion was filed -- I
24 don't know if it was a motion or whatever, but
25 a judge struck my report because, one, it said

1 I had no training in anything to do with
2 weather, that I was only a code official, which
3 was not true. And two, experts, as you know,
4 can rely on information that they are provided.
5 The information I was provided by -- with the
6 minister -- the minister wasn't even in the
7 church when this occurred, so everything the
8 minister had given me was misleading or false
9 information. So that's why he struck the
10 report. I never even knew that that was being
11 filed. I never had a chance to put an
12 affidavit forward to answer any of that
13 information. I certainly wouldn't have been
14 able to answer the information regarding the
15 minister lying to me, but I certainly could
16 have addressed the information about the
17 weather data. All right? So that is one I am
18 aware of.

19 Q. Okay. So --

20 A. I don't know if that fits the criteria of
21 what you were asking about.

22 Q. Well, that's fine. I was actually -- so
23 this is the only instance you're aware of where
24 your report was stricken?

25 A. Yes.

1 Q. Okay. What I'm asking is -- I'd like
2 every instance that you're aware of where a
3 court said: You can't come into my courtroom
4 and testify, either in whole or in part, as an
5 expert witness, in other words, some of your
6 expert opinions can be given, but others can't,
7 or none of your expert opinions can be given.
8 Talking about testifying. Now, you've already
9 indicated about the Morrissey case --

10 A. Yeah.

11 Q. -- in St. Paul. Are there any others
12 where a judge has ruled you cannot either
13 testify at all as an expert witness or testify
14 to some of your opinions as an expert?

15 A. Not that I'm aware of.

16 Q. Okay. If a judge had ruled that you could
17 not come into court and testify as an expert --

18 A. I would know that, yes.

19 Q. -- in whole in or in part, would you know
20 that?

21 A. Yes.

22 Q. Okay.

23 A. I would know that, yes.

24 MR. CONCHIN: Wayne, you're not
25 asking him about the subject matter that we're

1 here on related to 19 and you're asking him a
2 generalized question, is that --

3 MR. TAYLOR: That's correct. I'm
4 asking previous times. Yeah, let me --
5 maybe -- if it's not clear to you, maybe my
6 question wasn't clear, so let me ask again.

7 MR. CONCHIN: I heard it, but it's
8 cutting out a little bit.

9 MR. TAYLOR: Okay.

10 MR. CONCHIN: I don't know if
11 your -- you know, your question was cutting
12 out. I heard his answer.

13 MR. TAYLOR: Okay.

14 THE WITNESS: Yeah.

15 BY MR. TAYLOR:

16 Q. Okay. So the only time that a court has
17 issued a ruling that said you cannot come into
18 the courtroom and testify as an expert is the
19 Morrissey case in St. Paul?

20 A. Yes.

21 Q. When you are retained, do you -- are you
22 generally retained to provide estimates on the
23 amount of damages, or are you more frequently
24 retained on causation?

25 A. More frequently on both. The -- I just

1 testified last week in federal court down in
2 Georgia, in Albany, Georgia and was qualified
3 in that case as a building failure causation
4 code and damages expert, which is typically the
5 designation that I am qualified under. So
6 we -- because we have that trifecta experience
7 in our company and the skill sets, we're
8 typically asked to do all three. In this case
9 we were not asked to provide an estimate, but
10 usually we do.

11 Q. You were only asked in connection with the
12 wind claim to give an opinion on causation?

13 A. Well, I would say with the wind claim and
14 causal-related damage on the fire claim. We
15 were not -- we did not do a cause and origin
16 location issue with the fire claim, but we did
17 do ensuing loss damage, which would lead to
18 scope of repair.

19 Q. When you were contacted by Mr. Howarth in
20 this matter, was it originally by telephone?

21 A. Yes.

22 Q. How much information did Mr. Howarth give
23 you in that initial call?

24 A. Probably five minutes worth. I mean, he
25 basically -- if I recall, it's been a while,

1 but he would have -- knowing Chuck, he would
2 have said: Hey, I got another claim for you if
3 you're interested. It's going to appraisal,
4 because that's how Chuck does things. So my
5 understanding was this was going to appraisal.
6 We would be hired to look at causation for the
7 wind claim. And we would be hired to do a
8 smoke, particulate matter analysis for the fire
9 claim. We've done probably 60 or 70 of those
10 types of fire claims for Mr. Howarth. I think
11 we did most of downtown Gatlinburg after that
12 wildfire.

13 Q. So Mr. Howarth has hired, you said, 50 to
14 60 claims -- on 50 to 60 claims?

15 A. Probably, yeah.

16 Q. Is that a good number, you think,
17 pretty --

18 A. Pretty good.

19 Q. Pretty accurate?

20 A. Pretty accurate.

21 Q. Okay. And over what period of time is
22 that 50 to 60 claims?

23 A. Six, seven years.

24 Q. So when was the first time that
25 Mr. Howarth hired you on a claim?

1 A. Oh, boy. Good question. Probably 2013.

2 Q. Okay. And how did Mr. Howarth find you
3 the first time?

4 A. I think he heard me speak at a -- at the
5 National Association of Public Insurance
6 Adjusters' annual meeting in Rhode Island. So
7 that would have been October of 2012 or 2013.
8 I think it's in my CV. And I gave a
9 presentation on the soot analysis process that
10 we had developed over about a four-year period
11 working with the University of Minnesota. And
12 he had a couple of fire losses that he called
13 about, and then found out that we do wind and
14 hail and defect and basically all of those
15 things. And so we do a variety of things with
16 him, yeah.

17 Q. So over -- so approximately eight to ten
18 claims a year he's hired you on?

19 A. Roughly, yeah.

20 Q. Since that time?

21 A. Yes.

22 Q. Have you ever worked with Mr. Conchin
23 before?

24 A. Never have. In fact, this is the first
25 time I ever -- I didn't even know what he

1 looked like, so good to see what he looks like,
2 not a bad looking guy, yeah.

3 Q. Is this the only matter that you have in
4 which Mr. Conchin is involved, or this is just
5 the first one?

6 A. I think this is the only one.

7 Q. Have you ever met or communicated with the
8 owner of Haman, Inc., Ms. Zarin Visram?

9 A. No.

10 Q. Would it be fair to say that the only
11 communications you've had in connection with
12 the fire and wind claims in this matter are
13 either with Mr. Howarth or Mr. Conchin?

14 A. Well, my team --

15 Q. I'm talking about outside of FBS. I'm
16 talking about -- well, you're -- let's talk
17 about you.

18 A. Me individually?

19 Q. Yes.

20 A. Me individually, my communication has been
21 with my team, and it has been with Mr. Howarth
22 initially, but again, very limited, and with
23 Mr. Conchin very limited.

24 Q. And that's it?

25 A. Yeah. That's it.

1 Q. What about other members of your team, who
2 else would they have communicated with other
3 than within your company?

4 A. Well, they -- when Jim and Adam did their
5 inspection, the maintenance -- and I can't
6 remember the name of the guy, the maintenance
7 guy was there and providing access and opening
8 up locks on doors and things like that for us
9 to inspect.

10 Q. You don't remember the maintenance man's
11 name?

12 A. No. I think it's the same maintenance guy
13 that everybody has shown. I think that's
14 all -- everybody -- all the reports that I was
15 reading from experts for Chubb, I think they
16 all refer to him as the maintenance guy as
17 well. I don't think anybody has a name for
18 him, but I'm assuming it's the same guy, yeah.

19 Q. When you went out initially in June of
20 2015, who gave you access?

21 A. Maintenance guy.

22 Q. And you don't have his name?

23 A. No.

24 Q. And when you went out in April of 2019,
25 there wasn't anybody else there?

1 A. No.

2 Q. So you were by yourself?

3 A. Yes.

4 Q. Are your bills for serving as an expert
5 witness in this case being still sent to
6 Mr. Howarth, or are they going to Mr. Conchin?

7 A. Mr. Conchin.

8 Q. And what kind of rate are you charging
9 Haman Incorporated to serve as an expert
10 witness in this case?

11 A. We do these one of two ways. We either do
12 a half- or full-day rate plus any prep time
13 and/or travel depending on where I'm going, or
14 we do hourly. In this case for the deposition,
15 we will be billing for a full-day rate plus a
16 couple of hours of prep and my Uber ride back
17 and forth, so -- yeah.

18 Q. And what is the full-day rate?

19 A. 3,500.

20 Q. And how much additional are you being paid
21 for your prep time?

22 A. Couple hours. So my billing rate is \$400
23 an hour, yeah.

24 Q. So you're going to charge an additional
25 \$800 --

1 A. Yes.

2 Q. Okay. So for two hours?

3 A. Yes.

4 Q. So the total bill for your deposition then
5 will be \$4,300 plus your Uber rides?

6 A. Yeah, I believe. In fact, I've been paid
7 already. I believe I received a check
8 yesterday in the mail for, you know, 4,300 and
9 change, so that should be just about right.

10 Q. Did you insist on being paid in advance in
11 order to come to your deposition?

12 A. Yes.

13 MR. CONCHIN: You didn't want me to
14 submit his bill to you, did you, Wayne?

15 MR. TAYLOR: Well, I thought we
16 already had an agreement that you're going to
17 pay for your own experts and we were going to
18 pay for our own. Is that right?

19 MR. CONCHIN: We did.

20 MR. LEE: We did.

21 MR. TAYLOR: Very good.

22 MR. CONCHIN: We did.

23 MR. TAYLOR: Very good.

24 MR. CONCHIN: I pay my bills.

25 BY MR. TAYLOR:

1 Q. The company that you were operating at the
2 time that your general contractor's license was
3 revoked, was that Irmiter Contractors and
4 Builders Limited?

5 A. Yes.

6 Q. And you operated that from 1984 to 2000?

7 A. Yes.

8 Q. And is it 2000 when you ceased operation
9 because you had to give up your license?

10 A. Yes. We purchased the House of Dreams on
11 May 15th of 2000, and the business was kaput by
12 January -- by December 1st of 2000. And by the
13 way, they reopened as the House of Dreams six
14 months later with a completely clean slate and
15 no trailing liability.

16 Q. The case that you mentioned that you just
17 testified in that's pending in the state of
18 Georgia down in -- it's pronounced "Albany," by
19 the way.

20 A. You're right.

21 Q. Was that trial testimony, or was that a
22 deposition?

23 A. No, that's actual trial testimony. It's
24 not on the CV yet. That was a Baptist church.
25 And Church Mutual was the insured -- insurance

1 company. That actually was a Chuck Howarth
2 case that started as an appraisal and ended up
3 in trial. The insurance company offered zero.
4 My estimate was 1.4 million. The jury awarded
5 1.4 million plus seven percent interest for
6 four and a half years from the date of loss,
7 another 645,000.

8 Q. And who was the --

9 A. And I testified against two engineers.

10 Q. Who was the attorney that was representing
11 the insured in that one?

12 A. Brandon McWherter.

13 Q. And do you know who represented Church
14 Mutual?

15 A. Boy, I can't remember the guy's name.
16 Sorry.

17 MR. CONCHIN: Who used to represent
18 Church Mutual?

19 MR. TAYLOR: No, who represented
20 Church Mutual in that case.

21 MR. CONCHIN: Yeah. Who used to
22 represent them.

23 MR. TAYLOR: Oh.

24 MR. CONCHIN: Little humor there.

25 MR. TAYLOR: Sorry. That went over

1 my head, Gary.

2 MR. CONCHIN: Yeah. Okay.

3 MR. TAYLOR: Sorry about that.

4 MR. CONCHIN: David got that.

5 MR. LEE: I got it.

6 MR. TAYLOR: Well, sorry about that.

7 BY MR. TAYLOR:

8 Q. Could you -- at the end of -- after your
9 CV you've got the cover page to your report?

10 A. Yes.

11 Q. And it says Forensic Building Science,
12 Inc. Storm Damage Report.

13 Do you see that?

14 A. Yes.

15 Q. And then there's a seal --

16 A. Yes.

17 Q. -- for Brian Johnson?

18 A. Yes.

19 Q. And then it says Unverified in red?

20 A. Yes.

21 Q. What does that mean?

22 A. So various states will allow you to -- to
23 no longer have to wet seal. So Wisconsin, for
24 example, is a wet seal state. So as an
25 engineer you have to actually do the old

1 fashioned wet seal. Other states will allow
2 you to electronically seal, but in order to
3 electronically seal, then you have to have a
4 code to open up the report. So Brian Johnson,
5 if he opens this report, he can print it up and
6 it will say "Verified." If I open it up and
7 print it, it says "Unverified." So we can
8 certainly submit to you the verified copy.
9 It's identical to this. So it's really just a
10 glitch. You have to have Acrobat Reader and a
11 code to make sure it reads correctly. So
12 this -- I will testify that this is his report.
13 I've seen the verified copy. There's no
14 differences to it. It's just a printing issue.

15 Q. And where is the verified copy kept?

16 A. It would be kept with him. When he left,
17 he gets to take that information with him.

18 Q. Okay.

19 A. Yeah.

20 Q. I did not -- now, the signature that's
21 within the seal, is that part of the seal?

22 A. Yes.

23 Q. Okay. So he didn't sign that on top of
24 the seal?

25 A. He does. He signs that on top of the

1 seal, yes. That's digitally signed, and that's
2 allowed in the -- by the rules in the state of
3 Alabama. The rules also require that for a
4 report to be an engineering report, it has to
5 be stamped on the front page. It can't be
6 signed on the back page and then stamped. Then
7 it's not a legally and binding engineer's
8 report according to the rules in Alabama. So
9 Mr. Johnson's really anal about that. So all
10 of his reports are always stamped on the front
11 page.

12 Q. And then in the last page there is no
13 signature for Mr. Johnson, right, you've signed
14 it digitally?

15 A. Correct. Per the rules in the state of
16 Alabama for engineers.

17 Q. Can you identify which sections of this
18 report were drafted by Mr. Johnson?

19 A. Yes. Mr. Johnson would have done
20 section 1.11.

21 Q. 1.11 or 1.1.1?

22 A. I'm sorry. 1.1.1. And I would have
23 reviewed that. Let's see.

24 Q. When you say you would have reviewed that
25 section, what do you mean you would have

1 reviewed that section?

2 A. Okay. So here's what happens in our
3 report generating process. So -- and I can't
4 tell you today if this is the case, but -- when
5 this one was written. Jim Irmiter or Adam
6 Peiro or Ryan Neirengarten all would have had
7 and have the skill set to -- using a variety of
8 different templates that we have, to predraft
9 this report. So this report -- so, for
10 example, filling out client, Howarth Group,
11 putting in the address, putting in the
12 insurance information, all right, putting in
13 the picture that is on page 2 of 24 --

14 Q. Would the caption be included with the
15 picture or just placing the picture?

16 A. No, the caption would be as well, okay --

17 Q. Okay.

18 A. -- in this case.

19 Q. All right.

20 A. Putting in the caption under 1.2, the
21 satellite overview, and adding the numbers for
22 the buildings. So more of an administrative,
23 if you will -- again, utilizing a template.
24 Knowing that this roof had a certain type of
25 assembly to it, an EPDM roof, and then

1 underneath that a built-up roof, that would
2 have then triggered automatically some of the
3 items in section 1.9. This is a report
4 generator that we have. So as soon as you put
5 in this type of roof, it automatically inserts
6 a lot of these documents. Okay?

7 Q. Okay.

8 A. Then the inspection notes, which is
9 section 1.10, that would have all been entered
10 by one of those three, then --

11 Q. Those three being?

12 A. Adam, Ryan or Jim.

13 Q. Jim Irmiter, Ryan --

14 A. Neirengarten.

15 Q. -- Neirengarten --

16 A. Right.

17 Q. -- or --

18 A. Adam Peiro.

19 Q. -- Adam Peiro?

20 A. Right. Section 2.0, Site Observations,
21 would have again been entered by those guys.
22 All right? And then they would stop at
23 section 2.2. The report then -- everything
24 that had just been entered would be highlighted
25 in yellow. So from the very start of the

1 report until 2.2 would all be in yellow.

2 Everything after that would be in red, meaning
3 this is probably -- this is from a different
4 report. Some of it may be probative, some of
5 it may not: Tom, you and/or Brian need to go
6 through this and put in the language that is
7 specific to this site and the observations that
8 were made. All right?

9 Q. Okay. So 2.2, the causation statement,
10 and after that, that would have been done by
11 Adam Peiro and Jim Irmiter initially?

12 A. No. It literally would have just been a
13 causation statement from a completely different
14 report --

15 Q. Right.

16 A. -- inserted into there.

17 Q. But didn't you just testify that then they
18 would have to go back -- because it's in red,
19 they have to go back in and they have to then
20 change it to make it unique to this particular
21 claim?

22 A. No. Brian Johnson or I do that.

23 Q. I see.

24 A. So they don't touch anything after 2.2.

25 Q. Okay.

1 A. All right?

2 Q. And --

3 A. So the -- so in this case, the report -- I
4 started with the report. The report came to
5 me. I started at the front and I went through
6 all of the yellow. And I basically took all of
7 the yellow, went through it, checked all the
8 photos, reviewed everything and said: Yeah,
9 everything up to 2.2 looks good. I then change
10 it to a different color, green, which means
11 I've reviewed it: Brian, give it one more
12 look.

13 Q. Up to 2.2?

14 A. Yes.

15 Q. All right.

16 A. Then -- and I can't tell you right now,
17 depending on where report flow is, if it would
18 have then gone to Brian or if I did 2.2 to the
19 very end first.

20 Q. Okay. Well --

21 A. Okay?

22 Q. I guess that's the question I have.

23 A. Right.

24 Q. Can you identify for me which portions of
25 this report were actually drafted, the initial

1 drafting by Mr. Johnson?

2 A. Yes, based on -- I can tell you based on
3 some of his -- just a second. 2.5 for sure.
4 He and I would have worked on 2.6 together. I
5 mean, that's a -- that's -- to me, that reads
6 just like a -- something that we would have
7 collaborated on.

8 Q. Would you have sat down together to do it?

9 A. Yes.

10 Q. And so the narrative would have been
11 created as you're sitting side by side --

12 A. Yes. In fact --

13 Q. -- or on the telephone or what have you?

14 A. No. Back then we had our own office. I
15 mean, he was right next to me. And so we would
16 carve out once a day, twice a day, whatever,
17 where we would get a report into this point,
18 and then we would sit down and we would go
19 through what we could agree on, what we would
20 differ on. So that clearly would have been --
21 as far as the roof repair options, 2.9, I mean,
22 majority of that's going to be me because of my
23 background having worked in roofing before.

24 Q. I'm asking first --

25 A. I know.

1 Q. I just want to know what Mr. Johnson
2 actually drafted.

3 A. 2.9.3, he would have talked about that.
4 Although I list that I'm familiar with those
5 same requirements in there. He would have --
6 in section 3.1, the last sentence about the
7 metal deck, he would have -- that would have
8 been his. 3.4, 3.5, 3.6 would have been joint.
9 3.9, 4.0 would have been collaborative between
10 us both.

11 Q. 4.0 would have been joint?

12 A. Yeah. Definitely. That's it.

13 Q. Would you have written the rest?

14 A. Yes. He would have reviewed and agreed
15 obviously.

16 Q. Okay. So the sections that were written
17 by Johnson are 1.1.1, 2.5, 2.6 but jointly with
18 you, 2.9.3, 3.1, the last sentence, 3.4, 3.5,
19 3.6 jointly with you, 3.9 and 4.0 jointly with
20 you?

21 A. Yes.

22 Q. And then the rest of the report would have
23 been authored by you?

24 A. Yes.

25 Q. Was this document peer reviewed?

1 A. What do you mean?

2 Q. Well, certain --

3 MR. CONCHIN: What was the question?

4 MR. TAYLOR: I'm asking if it's been
5 peer reviewed.

6 THE WITNESS: By an outside firm?

7 BY MR. TAYLOR:

8 Q. Or --

9 MR. CONCHIN: Within his group,
10 outside the firm? What are you --

11 BY MR. TAYLOR:

12 Q. Or another engineer.

13 A. No, no. It's reviewed by Mr. Johnson and
14 I. That's it for the final. I would add that
15 another section here, 2.9.7 --

16 Q. For who? For Mr. Johnson?

17 A. Johnson and myself, yeah.

18 Q. 2. --

19 A. 9.7.

20 Q. Jointly?

21 A. Yeah.

22 Q. Is that it?

23 A. Yeah, that's -- I -- yes.

24 Q. And then the rest was by you yourself?

25 A. Yes.

1 (Exhibit Number 33 marked for
2 identification.)

3 BY MR. TAYLOR:

4 Q. Let me show you what's been marked as
5 Defendant's Exhibit 33 for identification.

6 A. (Views document.) Okay.

7 Q. And this is Haman, Inc.'s expert --
8 Rule 26 expert witness designation. And as
9 pertains to you, you can look at page 3, sir.

10 A. Yep.

11 Q. It lists you. Mr. Johnson is not listed
12 on here anywhere in this document, is that
13 right?

14 A. He is not.

15 Q. Okay. And it says under yours,
16 "Mr. Irmiter is a licensed building inspector
17 and appraiser with over forty-three years of
18 experience."

19 Is that what that says?

20 A. It does.

21 Q. Well, let me ask: Could you just read the
22 whole designation as it relates to you. It's
23 only on page 3. It does not go over on to
24 page 4 because that's the next person.

25 A. "Thomas Irmiter, president..."

1 Q. No, no, no. Don't read it in.

2 A. Oh.

3 Q. Just read it to yourself.

4 A. Oh, I thought you wanted me to read it
5 into the record.

6 Q. No.

7 A. I've read it already.

8 Q. Okay.

9 A. Yeah.

10 Q. Did you have any role in preparing this?

11 A. No.

12 Q. So this was just done by Mr. Conchin's
13 office on his own?

14 A. Yes.

15 Q. And the second sentence, it says, "He has
16 investigated literally thousands of storm and
17 fire damage claims."

18 A. Yes.

19 Q. Is that a true statement?

20 A. It's over 10,000, so yes.

21 Q. Okay. 10,000 over what period of time?

22 A. Oh, my first investigation would have been
23 circa 1984.

24 Q. That would be, what, about 35 years?

25 A. Yeah.

1 Q. So over 10,000 investigations in 35 years?

2 A. Yes. Easily.

3 Q. Is it closer to 11,000 or --

4 A. Well -- I mean -- so do you take a --
5 block-long, 20-story structure with 620
6 individual units at 3,000 square feet each that
7 have been damaged by Hurricane Maria in Puerto
8 Rico and do you count that as one structure
9 with the ten outbuildings that it has, or do
10 you count that as 700 structures because each
11 one is the size of a residential house? How do
12 you count it?

13 Q. Well, this says --

14 A. If that's the case, then it's 25,000. I
15 mean --

16 Q. It says, "He has investigated literally
17 thousands of storm and fire damage claims."

18 A. Yes.

19 Q. Okay. So that's the question. Is --

20 A. That is a correct -- that is correct.

21 Q. Okay. So --

22 A. Literally thousands.

23 Q. Literally thousands. And if we try to get
24 a pretty good number, that's -- it's over
25 10,000 over a 35-year period?

1 A. Yes.

2 Q. So that would be over --

3 MR. CONCHIN: Do we need to go over
4 this?

5 BY MR. TAYLOR:

6 Q. That would be over 350 claims per year on
7 average?

8 A. Yes.

9 Q. Does that sound about right, or do you
10 think it's more?

11 A. Depends on the year. Some years it's more
12 than that.

13 Q. Is that a good average, 350?

14 A. Yeah.

15 Q. And that would be 350 reports that would
16 have your name on it each year?

17 A. Just because I investigated it doesn't
18 mean I issued a report.

19 Q. Fair enough. How often -- how frequently
20 do you issue a report after you've investigated
21 a claim percentage-wise?

22 A. Sixty percent of the time.

23 Q. So approximately 200 reports with your
24 name on it a year?

25 A. Probably.

1 Q. Let's turn back to what we've marked as
2 Exhibit 32 for identification, which is your
3 report. This is -- this report that's right
4 here is only with regard to the wind claim, is
5 that right?

6 A. Correct.

7 Q. Now, I noticed that there is some weather
8 data within the report. There's a -- like,
9 there's path, is that right?

10 A. Yes.

11 Q. Okay. And, in fact, that's on page 3 of
12 24 of your report, is that right?

13 A. Yes.

14 Q. And I can't read -- but it looks like
15 there's an interstate, but I can't read which
16 one that is --

17 A. I can't either.

18 Q. -- on my copy. But it -- that's an
19 interstate. Oh, is it I-59 maybe?

20 A. Can't tell.

21 Q. Because I'm looking at the -- not at the
22 labels, but there's some writing here, and it
23 looks like I-59 south.

24 A. May well be.

25 Q. Okay.

1 A. Yeah.

2 Q. And then there's an arrow right off the --
3 that hits the freeway. And then to the right
4 of it there's some kind of a blue, I guess,
5 pin?

6 A. Yes.

7 Q. And that would be the Knights Inn?

8 A. Yes.

9 Q. And then the yellow shaded area, is that
10 the tornado's path?

11 A. Yes.

12 Q. So it appears that the location of the
13 Knights Inn is outside of the tornado's actual
14 path?

15 MR. CONCHIN: Object to form.

16 BY MR. TAYLOR:

17 Q. Is that correct?

18 A. It's not in the center of the path. It's
19 on the edge.

20 Q. Well --

21 A. Yeah.

22 Q. -- where is the edge? Is the -- what's in
23 yellow is that the path in the -- the entire
24 band of the tornado's path?

25 A. Well, you -- yes. Yes.

1 Q. And the pin, which would designate the
2 location of the Knights Inn, is to the left of
3 that path, is that right?

4 A. Yes.

5 Q. So that the tornado was not in the
6 direct -- or the Knights Inn was not in the
7 direct path of the tornado?

8 A. Correct. Yeah, it wasn't in the direct
9 path. It was on the edge.

10 Q. In fact, it's outside the edge, right?

11 A. Yes, .15 miles from the center. We call
12 that within spittin' distance.

13 (Exhibit Number 34 marked for
14 identification.)

15 BY MR. TAYLOR:

16 Q. Let me show you what's been marked as
17 Exhibit 54 [sic] for identification.

18 THE COURT REPORTER: 54?

19 MR. TAYLOR: Defendant's Exhibit 34.
20 I'm sorry. I'm apparently numerically
21 challenged also.

22 THE WITNESS: (Views document.)

23 BY MR. TAYLOR:

24 Q. And as you can see from the top left, this
25 came from the National Weather Service website.

1 A. Yes.

2 Q. Do you recognize this?

3 A. I do, yes.

4 Q. Have you ever seen this before?

5 A. Yes, I have.

6 Q. Okay. And the portion that's in yellow
7 would indicate the path of the tornado, is that
8 right?

9 A. Yes.

10 Q. Okay. And just so we can get our
11 bearings, is -- the top of the page, is that
12 north, south, east or west?

13 A. North, I assume.

14 Q. Yeah. Well, there's an arrow down on the
15 right bottom, right corner, the --

16 A. There's no marcation on that, but I'm
17 assuming that arrow indicates it's pointing
18 north, so the top of the page would be north.

19 Q. That would typically be the way it is,
20 right?

21 A. Typically.

22 Q. Okay. And then it shows four diamonds in
23 here, right?

24 A. Well, one, two, three, four --

25 Q. I'm sorry. In the middle.

1 A. Okay. Yes, there's four in the middle.

2 Q. Okay. And one is yellow --

3 A. Yes.

4 Q. -- pretty close to the middle. It says
5 EF2, right?

6 A. Yes.

7 Q. And then a little below that is a green
8 one that says EF1?

9 A. Yes.

10 Q. Okay. What does that mean within there
11 when you're looking at that?

12 A. That means the wind speed.

13 Q. At those locations?

14 A. Well, let me qualify this if I can. Based
15 on -- and it's in my CV. Based on sitting
16 through at least four presentations by either
17 meteorologists -- by meteorologists about --
18 and based on the training that I had as a storm
19 chaser, the -- there wasn't somebody standing
20 where it says EF2, where the yellow diamond is
21 holding a wind-measuring device to be able to
22 tell NOAA that that's what the speed was.
23 These are all done based on algorithms.

24 Q. This also -- this is -- what we're looking
25 at that we've marked as Exhibit 34 for

1 identification is prepared by the National
2 Weather Service after the tornado?

3 A. Absolutely. So these are algorithms. And
4 these are based on a meteorologist looking at
5 those algorithms and saying this is likely what
6 occurred at this pinpoint location or this
7 location or this location based on what they're
8 seeing on the actual paper readout. I think a
9 lot of people call it, you know, the hook of
10 the tornado, that signature that they're
11 looking at. So they're designating that. What
12 I can't tell by this, because I don't know when
13 it's dated, I can't tell if this is also then
14 tied to ground-truth investigation where they
15 physically stood at this location after the
16 fact, they looked at the size of tree branches
17 or trees or telephone poles that were snapped
18 or not to determine -- which is the other way
19 that you do this, to determine through the
20 debris field the wind clearly couldn't have
21 done it -- this to this particular product
22 unless it reached that speed. So the EF scale
23 deals with not only wind speed but collateral
24 damage as well. It gives you signature things
25 to look at. I can't tell by looking at that if

1 that's been done here. Okay?

2 Q. I'd like you to go ahead and assume that
3 that, in fact, has been done here. If that's
4 what we're looking at, would that show us the
5 path and give us an indication of the wind
6 speeds within the tornado along this path?

7 A. Yes. If that's all that you were relying
8 on, this particular data would tell you that,
9 yes, these would be the wind speeds, yeah.

10 Q. And if we -- in between on a -- kind of a
11 diagonal slant from the seal on the top left
12 where the National Weather Service is --

13 A. Yes.

14 Q. -- if we go a little bit to the right and
15 then a little bit down on the page, outside the
16 path of the tornado, that's where the Knights
17 Inn is located, is that right?

18 A. Yes. It's right here (indicating), yes.

19 Q. Let the record reflect that he's pointed
20 to exactly where the -- and it is not in the
21 yellow-shaded area, is that correct?

22 A. It is not in the direct path, correct.

23 Q. Okay. And we're --

24 MR. LEE: Why don't we either write
25 "Knights Inn" or circle the hotel or do

1 something on there so we have a -- let him do
2 it.

3 MR. TAYLOR: Sure.

4 BY MR. TAYLOR:

5 Q. If you would, circle the Knights Inn.

6 A. (Complies.) There it is.

7 Q. Perfect.

8 MR. TAYLOR: Let the record reflect
9 that Mr. Irmiter has circled the Knights Inn
10 property.

11 BY MR. TAYLOR:

12 Q. And we can see that the entire property or
13 at least the buildings for that property are
14 outside of what is denoted as the path of the
15 tornado, is that correct?

16 A. Yes.

17 Q. And in between the path of the tornado and
18 the buildings that comprise -- the three
19 buildings that comprise the Knights Inn there
20 are trees, is that right?

21 A. Yes. There's an escarpment [sic] and
22 trees.

23 THE COURT REPORTER: A what and
24 trees?

25 THE WITNESS: Escarpment,

1 e-n-s-c-a-r-p-m-e-n-t [sic].

2 BY MR. TAYLOR:

3 Q. And explain what an escarpment is.

4 A. A hill --

5 Q. Thank you.

6 A. -- which affects wind speed.

7 Q. In reviewing the report, other than the
8 map that's on page 3 of 24 that shows the path
9 of the tornado and the fact that the Knights
10 Inn is outside of that path, is there any other
11 weather data that was collected to determine
12 what the wind speeds were at the property
13 itself, at the Knights Inn?

14 A. Well, I will answer the question this way:
15 At the time we issued this report, the NOAA
16 website was down and we could not access what
17 was called the SWDI reports. In preparation
18 for my deposition, I did access those reports.
19 And those reports have two important pieces of
20 data that would align with what we saw on site.
21 They have what's called a mesocyclone
22 signature, and they have a tornado signature.
23 The mesocyclone signature shows 20 instances of
24 mesocyclones that are on both sides of the
25 Knights Inn, and it shows a tornado signature,

1 two of them, one right in this location where
2 the green dot is and one on the other side.

3 Q. Okay. Did you bring that documentation
4 with you?

5 A. No. No. I have it on my computer. And I
6 saved it. And it's something we can
7 certainly -- could probably utilize. But no, I
8 have not -- I haven't issued a supplemental
9 report on that information, but that is now
10 available. So that would tell me that, yes,
11 this was the path, but there were certainly --
12 based on that NOAA data, which wasn't available
13 at the time but now is available, there
14 certainly were other signature patterns on
15 either side of the hotel that would be
16 consistent with the damage that we saw and
17 creating enough wind to cause the damage we
18 saw.

19 Q. And what were the wind speeds that that
20 report showed?

21 A. Well, mesocyclone -- number 1, the tornado
22 signature, they're not even going to post it on
23 that website unless it's at least an EF0. So
24 we know that that's in excess of 80 miles an
25 hour likely. And then the mesocyclone, that

1 really is the start of a tornado signature. It
2 doesn't mean it develops into a tornado
3 signature.

4 Q. Okay.

5 A. It just indicates that the -- in this
6 entire area there were 20 instances. Some of
7 it here (indicating), but some of it on the
8 other side of the hotel. Tells me there's a
9 lot of wind.

10 Q. On the other side of the freeway?

11 A. I'd have to have the data in front of me
12 and compare it, yeah.

13 Q. And other than checking this data
14 yesterday that you didn't bring with you today,
15 did you make any other effort to determine wind
16 speeds that were affecting the Knights Inn on
17 the date that the storm came through, which was
18 April of 2014?

19 A. Well, sure, just looking at the collateral
20 damage. The wind clearly exceeded the design
21 load for both the roof and for the metal.

22 Q. You're misunderstanding my question.
23 Talking about: Did you go get wind data, in
24 other words, what the wind speeds were? Were
25 they 50 miles an hour? Were they -- did the --

1 the data that you can access, was it 60 miles
2 an hour?

3 A. There is no data. There is no specific --
4 there is not a storm chaser or a law
5 enforcement officer who would typically report
6 to NOAA what they believe the wind speed is
7 based on collateral damage anywhere around this
8 area.

9 Q. Okay.

10 A. So there is not a report that we could
11 utilize or find. And reading the reports that
12 were produced by Mr. Mulder, he didn't find any
13 either.

14 Q. Are there other sources of that type of
15 information?

16 A. Sure. We could hire a meteorologist.
17 Either side could hire a meteorologist to do
18 that detailed analysis and give you an opinion
19 based on, as I said before, the mesocyclone
20 signatures, the tornado signatures that I have
21 seen on either side of the building, what
22 actually occurred within a reasonable degree of
23 certainty in terms of wind speeds, but I have
24 not seen that produced by anybody.

25 Q. Did you consult with a meteorologist?

1 A. I did not.

2 Q. Have you ever heard of a site called
3 Weather Underground?

4 A. Oh, yes.

5 Q. And do you consider Weather Underground to
6 be authoritative?

7 A. They use algorithms, so not necessarily.
8 I've seen flaws with Weather Underground
9 before.

10 Q. Okay. How about CoreLogic? Have you
11 heard of CoreLogic?

12 A. Yes, I'm familiar with CoreLogic. We've
13 seen a variety of results from CoreLogic based
14 on ground-truth investigations and information
15 that they have provided to be completely polar
16 opposite. For example, we've seen reports
17 where they say there's three-inch hail and we
18 get to the site and there's no hail damage at
19 all. And we've seen them say there's one-inch
20 hail and we see collateral three-inch hail.
21 So, again, I don't rely on CoreLogic, yeah.

22 Q. So you don't consider CoreLogic to be
23 authoritative?

24 A. Well, no, I don't.

25 Q. And you don't consider Weather Underground

1 to be authoritative?

2 A. It's a source, yeah. There's nothing --
3 you have to understand, we rely -- in our
4 practice, we rely on weather data from a
5 definitive source like NOAA to tell us that
6 there was an event on or around that day.
7 That's why we use it. The ground-truth
8 investigation, the collateral damages that we
9 look at, the metal that blew off the roof, the
10 fasteners that blew off the roof, the fully
11 adhered EPDM membrane that is no longer fully
12 adhered -- I'm talking about the seams. I'm
13 talking about the entire assembly has lifted.
14 It was glued down before. It's no longer glued
15 down. That's classic wind damage consistent
16 with this storm. That tells a much better
17 picture than any of the stuff you've put in
18 front of me.

19 Q. How old was the EPDM roof?

20 A. Oh, jeez, I think they said probably 20,
21 25 years old, yeah.

22 Q. And the blue mansard, was that newer or
23 about the same --

24 A. Newer.

25 Q. Okay.

1 A. Yeah.

2 Q. When was the blue mansard --

3 A. I think somebody pegged it based on Google
4 Earth pictures to 2006, something like that.

5 Q. And based on -- since you've walked on the
6 roof, would you agree that the EPDM portion of
7 the roof, the flat portion of the roof was at
8 least 20 years old --

9 A. Yes.

10 Q. -- or in that vicinity?

11 A. Yes. And full debonded. And it wasn't
12 originally.

13 Q. Could it have become debonded just because
14 it was a 20-year-old roof?

15 A. If that were the case, then I would expect
16 to see something called ballooning. I would
17 expect to see stretching of the membrane. I
18 didn't see that.

19 Q. You didn't see any of that?

20 A. No, I did not see any of that. I saw wind
21 damage at the seams, but I did not see classic
22 fatigue of EPDMs. I put the first EPDM roofs
23 on that were commercially available. I've been
24 working with the product since its inception.
25 We use a lot of EPDM up here. It's probably

1 the number 1 product up in Minnesota that we
2 use for flat roofs. And I just did not see --
3 it's an old roof, absolutely, but it's also
4 been severely weather damaged.

5 Q. The mansards that surround the roof, when
6 you're standing on the flat roof, how high up
7 do those mansards go? I don't know if you call
8 it a --

9 A. You can't see --

10 Q. -- or is it a parapet?

11 A. Well, yeah, it's a parapet. It's a
12 hand-framed parapet mansard. You can't see
13 over them. I mean, you've got to --

14 Q. So at least six feet?

15 A. Yeah. They're tall.

16 Q. So when you're standing on the roof and
17 you -- since you can't see over it, then the
18 parapet wall that surrounds the roof is at
19 least six feet?

20 A. Absolutely.

21 Q. Could it be as many as seven feet?

22 A. Yes, in some locations.

23 Q. Could it be eight feet?

24 A. No, I don't think it hits eight feet.

25 Q. Okay. So somewhere -- so --

1 A. Yeah.

2 Q. -- depending where you are on the roof,
3 it'll be between six and seven feet when you're
4 standing on the flat roof --

5 A. Yes.

6 Q. -- the EPDM?

7 A. Yes.

8 Q. Is this the same for all three buildings?

9 A. I believe so. I would really want to see
10 my photos before I would put my pin in that.
11 And they don't have those available today, so
12 I'm doing that off of memory.

13 MR. LEE: Let's go off the record
14 for just one second.

15 THE VIDEOGRAPHER: We are going off
16 the record.

17 The time is 12:03 p.m.

18 (Lunch break taken at 12:03 p.m.)

19 AFTERNOON SESSION, 12:59 p.m.

20 THE VIDEOGRAPHER: This begins media
21 unit number 3.

22 We are going back on the record at
23 12:59 p.m.

24 BY MR. TAYLOR:

25 Q. Mr. Irmiter, we are back to continue with

1 your deposition following a relatively brief
2 lunch break. During that break, did you speak
3 with anybody about this case?

4 A. No.

5 Q. You had indicated earlier that Ryan
6 Neirengarten -- did I pronounce that correctly?

7 A. Yes.

8 Q. Had been let go?

9 A. Yes.

10 Q. What was the reason he was let go?

11 A. We had moved Ryan into a position of field
12 operations, managing our entire field
13 operation, scheduling, doing those kinds of
14 things. He -- his work product just really
15 began to suffer. He just started to -- I don't
16 want to say bad things. He just didn't fit.
17 So -- we're an at-will employee [sic]. We
18 get -- employing state. We get to do that with
19 people. So wasn't an easy decision. He was
20 my -- he was with me longer than anybody.

21 Q. How long was he with you?

22 A. Ten years.

23 Q. And then so you made him into a -- you
24 made him a manager, and then he -- and his work
25 product started slipping once he became a

1 manager?

2 A. Before that. This was a chance to give
3 him some opportunities to move up and -- you
4 know, I've owned businesses for a number of
5 years. And two things happen with employees.
6 They either outgrow the organization or the
7 organization outgrows them. In this case the
8 organization outgrew him, so...

9 Q. Fair enough. Before we went back on the
10 record we were talking about those SWDI reports
11 that you had gotten, the digital mesocyclone
12 and tornado reports --

13 A. Yes.

14 Q. -- that you had obtained. And I had asked
15 you if you could get somebody from your office
16 to send them over and you said that that's just
17 not going to be possible.

18 A. Right.

19 Q. If you would, would you please provide
20 those to Mr. Conchin so he could then forward
21 them to me?

22 A. Absolutely.

23 Q. Very good.

24 A. Yep.

25 Q. Thank you.

1 MR. TAYLOR: Got that, Gary?

2 MR. CONCHIN: Got it. I've
3 confirmed, by the way, that we have those
4 photos and then a Dropbox was attempted. I
5 don't know what happened. So we'll send them
6 to you again.

7 Tom, I -- would it be 900 or 500
8 photos?

9 THE WITNESS: Could be either. I
10 don't remember.

11 MR. CONCHIN: Okay.

12 THE WITNESS: And we would have --

13 MR. CONCHIN: I think --

14 THE WITNESS: We would have sent
15 them to you in two forms. We would have sent
16 the Word document. Okay? And then we would
17 have sent -- so in the Word document there
18 would be one, two, three, four -- it would be
19 six -- six for the wind claim and probably one
20 or two for the fire claim. And then in the --
21 and then we would have sent you the raw JPEGs.
22 So, for example, the difference there --

23 MR. CONCHIN: I got those.

24 THE WITNESS: Yeah. The difference
25 there might be that in building number 1 in the

1 Word document that we produced you may have 130
2 photos. The raw JPEGs there may be 145. And
3 the reason -- the difference would typically be
4 because we took two shots of exactly the same
5 thing or it was blurry, and so we didn't
6 include those in the Word document, but we
7 didn't destroy the raw.

8 MR. CONCHIN: I've got the JPEGs.

9 THE WITNESS: Yep.

10 MR. CONCHIN: We'll just send -- if
11 we send the JPEGs, then they got everything?

12 THE WITNESS: They got everything,
13 yep.

14 BY MR. TAYLOR:

15 Q. Anyway, so those --

16 MR. CONCHIN: [Unintelligible].

17 MR. TAYLOR: All right. Great.

18 Thank you, Gary.

19 BY MR. TAYLOR:

20 Q. And then the SWDI reports, I guess, either
21 today or tomorrow you'll forward those to
22 Mr. Conchin and --

23 A. Great.

24 Q. -- his office can then forward those
25 immediately on to me. I appreciate that.

1 With regard to your report in connection
2 with the wind claim that we've marked as
3 Defendant's Exhibit 32 for identification, are
4 there any opinions that you have formed and
5 will be testifying about that are not contained
6 within that report?

7 A. No, other than the SWDI reports that I
8 have indicated, which --

9 MR. CONCHIN: Yeah, I was going to
10 say other than what he testifies here to today
11 because you may ask him questions that are not
12 in his report. And if he espouses an opinion,
13 we certainly -- but other than what he's going
14 to testify here today --

15 MR. TAYLOR: Well, problem --

16 MR. CONCHIN: -- about SWD.

17 MR. TAYLOR: Problem is I can't ask
18 him about the SWDI report because I don't have
19 it in front of me. He didn't bring it with him
20 today, so --

21 MR. CONCHIN: I'm not talking about
22 that. I'm not talking about that. I'm talking
23 about anything else you're asking and he said
24 no, but I would qualify that other than what
25 he's going to testify here today. Okay?

1 MR. TAYLOR: Fair enough.

2 MR. CONCHIN: We understand the SW.

3 BY MR. TAYLOR:

4 Q. Okay. But as far as you know, all of the
5 opinions that you formed in connection with the
6 wind claim are contained within your report
7 that we've marked as Defendant's Exhibit 32?

8 A. Well, I have not -- at the time of issuing
9 this report and I was looking back through the
10 documents, we did not have in our possession --
11 under section 1.4, "The following documents
12 have been received," we did not have the report
13 issued by Mr. Mulder. So if I am asked to give
14 an opinion about his report, about his
15 methodology and about his findings, I certainly
16 will do that because I have some opinions about
17 that.

18 Q. Have you prepared a supplemental report in
19 connection with that?

20 A. I have not been asked to do that.

21 Q. Now, the first time that you visited the
22 Knights Inn personally in June of 2015, I
23 believe earlier today you said you spent about
24 an hour and a half total at the site. Does
25 that sound about --

1 A. On that day, yes.

2 Q. On that day. And you got up on all three
3 roofs?

4 A. Yes.

5 Q. And how long did you spend up on each
6 roof?

7 A. Twenty minutes.

8 Q. How many units did you go inside of?

9 A. I cruised through the hallways pretty
10 quickly in each building and peeked my head in,
11 ten or 15.

12 Q. Did you actually go in or literally open
13 the door and pop your head in?

14 A. Well, literally opened my door and
15 popped -- you know, popped my head in.

16 Q. Did you walk into any of the units?

17 A. No. I didn't have any personal protection
18 equipment, so I wasn't going to get
19 contaminated by what I was seeing.

20 Q. In approximately how many units did you
21 pop your head into?

22 A. As I said, ten to 12.

23 Q. Total?

24 A. Yes.

25 Q. I just didn't know if that was each

1 building or if that was total. Okay. Thank
2 you for that.

3 Are you going to be providing testimony as
4 to the portions of the report that were solely
5 drafted by Mr. Johnson?

6 A. From the standpoint of my -- well, yes,
7 from the standpoint of my having reviewed
8 those, having agreed with them as opinions,
9 otherwise I would not have put my signature on
10 a combined document, so yes.

11 Q. Okay. So portions of the report that were
12 solely prepared by Mr. Johnson you're also
13 going to be testifying about?

14 A. Yes, because I reviewed those.

15 Q. Even those where he gives a conclusion to
16 a reasonable degree of engineering certainty?

17 A. No, I can't do that. Mine would be to a
18 reasonable degree of building science
19 certainty.

20 Q. Okay. So you can't give an opinion to a
21 reasonable degree of engineering certainty?

22 A. Well, I'm not an engineer, so no. I can
23 reference the building codes, I can reference
24 the engineering specifications within the
25 building codes, I can reference the ASCE wind

1 load requirements within the building codes,
2 but I cannot give an engineering opinion per
3 se.

4 Q. In preparing your report and forming your
5 opinions, you didn't have anything from your
6 initial June 2015 visit other than your memory
7 because I think you said something happened
8 with your phone, and so whatever photographs
9 were on there you couldn't use, is that right?

10 A. That's correct, yeah.

11 Q. Then the reinspection that you performed
12 in April of 2019 you did not go up on any of
13 the roofs?

14 A. No.

15 Q. In fact, you had just dropped by because
16 you were in the area?

17 A. Correct.

18 Q. So you didn't reinspect the roofs at that
19 point?

20 A. No, I did not.

21 Q. So the total amount of time that you have
22 spent on each of the roofs in connection with
23 both claims is about 20 minutes each?

24 A. Me personally?

25 Q. Yes.

1 A. Yes, me personally.

2 Q. Okay.

3 A. My team spent a total of ten hours on the
4 roofs.

5 Q. And Mr. Johnson has not visited the site
6 at all, is that correct?

7 A. That is correct.

8 Q. Okay. And those are the two authors of
9 the report?

10 A. That is correct.

11 Q. So essentially the report was drafted
12 based upon the photographs taken by other
13 members of your team, in other words, Mr. Peiro
14 and Jim Irmiter, and field notes?

15 A. Yes. The data that they gathered for me,
16 yes.

17 Q. What materials were you given and had in
18 your possession from a third party, such as
19 Mr. Howarth or anyone else, in order to be able
20 to form your opinions and draft your report in
21 connection with the wind claim?

22 A. The only documents we received are listed
23 in section 1.4 on page 4 of 24. And that would
24 be at the issuing of this report. I've
25 indicated that subsequently there are documents

1 that I've seen after the report, but these are
2 the ones that we had.

3 Q. What is a Capture Citizen Access info?

4 A. That is a -- that is a -- from the local
5 county, it is a county-appraised value of the
6 property minus the land.

7 Q. So it's a valuation?

8 A. It's a valuation, which would be
9 referenced in my code analysis under the
10 existing building code and the scope of work
11 exceeding 50 percent of the value of the
12 building potentially. That's why I did that.

13 Q. Okay. And then there's also listed the
14 insurance policy?

15 A. Yes, which I will tell you I did not
16 review. I don't care about the policies.

17 Q. Did Mr. Johnson review the policy?

18 A. No.

19 Q. And the Realtrac info on the Knights Inn
20 property, what is that?

21 A. I think that's another site that looks at
22 real estate value.

23 Q. Okay. And then an estimate of repair from
24 York?

25 A. Yes.

1 Q. And then Google Maps imagery of the
2 property?

3 A. Yes.

4 Q. And that is actually included within the
5 report, the Google Maps imagery of the
6 property, is that right?

7 A. I believe so, yes.

8 Q. Okay. And those are all the documents
9 that you had possession of or available to you
10 at the time that this report was prepared other
11 than your own data and photographs?

12 A. Well, section 1.9 is also documents that
13 we -- so you asked me what did we receive. We
14 received section 1.4 from Howarth. 1.9 are our
15 own documents that we have in our library that
16 we also would have used.

17 Q. Well, I've noticed down at the bottom of
18 page 4 of 24 you mentioned ESR 1463, Carlisle
19 EPDM?

20 A. Yes.

21 Q. Okay. Was this a Carlisle EPDM roof?

22 A. We don't know, yeah.

23 Q. So why did you necessarily look at the
24 Carlisle EPDM?

25 A. Well, ESR reports are reports that are

1 issued by the International Code Council.
2 They're called an evaluation service report.
3 So essentially every building product that is
4 utilized is evaluated by the International Code
5 Council and they take the manufacturers'
6 published installation instructions and they
7 boil them down to about a three- or four-page
8 cheat sheet for building code officials. The
9 code requires that all products must be
10 installed per manufacturers' published
11 instructions. This is just one example of a
12 product, an EPDM product. That's all this is.

13 Q. It's just an example?

14 A. An example, yes.

15 Q. Okay. If you go back up to 1.5,
16 section 1.5, you're talking about the dates
17 that the various buildings were constructed?

18 A. Yes.

19 Q. And then you have a bracket with other
20 years in them. What is the purpose of that?

21 A. The -- Capture Citizen Access and Realtrac
22 were giving us two different dates, which we
23 see. So we're putting them both down there,
24 yeah.

25 Q. So which one is, from what you could tell,

1 the more likely correct age?

2 A. The '74 or '72 seems to --

3 Q. So the one in the bracket is just an
4 additional date you were provided, which you
5 think is not correct?

6 A. Correct.

7 Q. So 1969 for building 1 and then 1972 for
8 buildings 2 and 3 you think is likely not
9 correct?

10 A. Yeah, it would seem unlikely that you
11 would build the conference center and the
12 ballrooms without having hotel guests to
13 utilize them, so...

14 Q. Go back to page 3. We talked about the
15 map that shows the track of the tornado --

16 A. Yes.

17 Q. -- on -- in April of 2014?

18 A. Yes.

19 Q. What is the source for this particular --

20 A. This would be -- it says Imagery. I don't
21 know the source. Just down on the bottom lower
22 corner there's an IM, but I can't tell from
23 this what that source is. It might be -- let
24 me see real quickly if we received -- no, we
25 didn't do the estimate on this, so we did not

1 do a -- what's called an EagleView. It's an
2 estimating software that you can order these
3 types of pictures from, and then they give you
4 all the square footages for doing your
5 estimating off of. This looks to me like one
6 of those, but I don't reference in my documents
7 that we ordered an EagleView, so --

8 Q. I'm not talking about the satellite
9 overview. I'm talking about the top --

10 A. Oh, this top one.

11 Q. -- that shows the path. What's the
12 source?

13 A. Oh, that one right there?

14 Q. Yes.

15 A. I don't know.

16 Q. Did you perform any calculations to
17 determine the wind loads for the roofs of the
18 three buildings?

19 A. Do you mean the design wind load --

20 Q. Yes.

21 A. -- prior to the storm?

22 Q. Yes.

23 A. No, we did not.

24 Q. And when you say "we," does that mean
25 nobody within your company did?

1 A. Yes, Brian Johnson and I did not. I am
2 familiar with what the code requirement would
3 have been in 1992 under the southern building
4 code that was in effect for that particular
5 roof assembly for the EPDM roofs. And I think
6 that's about the time that they were installed.

7 Q. But you didn't perform any calculations
8 to -- when you measure the different wind
9 speeds whether --

10 A. We did no uplift testing, if that's what
11 you mean. And in situ means in-field testing.
12 We did no in-field testing.

13 Q. Why didn't you do any uplift testing?

14 A. Why would we? The roof was already
15 debonded already. We couldn't uplift test it.
16 There was no way. We couldn't uplift test that
17 assembly even if it hadn't been debonded
18 because it was a second roof. It was
19 installed --

20 Q. So when --

21 A. Let me finish, please. It was installed
22 over an old built-up roof. So it is basically
23 a layover, which would make testing almost
24 impossible.

25 Q. So when you're talking about uplift

1 testing, you're talking about actual physical
2 testing?

3 A. Yeah.

4 Q. Okay.

5 A. There's a dome test that you put an actual
6 dome on there and you do an uplift test.

7 Q. I was -- my question was whether you had
8 done any calculations to determine based on its
9 design what kind of winds would be required in
10 order to cause damage or what it's designed to
11 withstand.

12 A. Well, I know what Mr. Mulder said in his
13 report, and he's wrong. But other than that,
14 no, we did not.

15 Q. And what did Mr. Mulder say in his report?

16 A. He said it's designed for 80 miles an hour
17 and that the wind did not exceed 80 miles an
18 hour at the site, but he's relating that to a
19 2006 building code. These were installed in
20 1992. In 1992, there were no uplift
21 requirements that were published in the
22 building codes. So Mr. Mulder is attempting to
23 take a 2006 requirement and put it into a roof
24 that's over 20 years old. That is just
25 ludicrous. Sorry.

1 And secondly, that requirement that he is
2 referencing in 2006 assumes that that EPDM
3 membrane is installed per current
4 manufacturer's published instructions, for
5 example, ESR 1463 for Carlisle EPDM roofs, and
6 that uplift testing is done at all the wind
7 zones on the site, and that it is not a
8 layover. It is a single roof that has been
9 installed as an assembly. This is multiple
10 roofs making testing it impossible. There is
11 no literature published to test this type of
12 assembly with multiple layers over it.

13 Q. And why can't it be tested?

14 A. How are you going to -- all the testing
15 that is referenced in the building code -- and
16 this is where the testing comes from. All the
17 testing is for brand new roofs. Edge testing,
18 center testing, all your wind zone locations,
19 if you're going to test those -- your fastener
20 securements, that's all for a new roof assembly
21 that's being put into place. I don't have a
22 new roof assembly here.

23 Q. So --

24 A. So we would expect that test to fail every
25 single time, which they typically do in the

1 field. So why would somebody pay the \$50,000
2 for an uplift test on these roofs when you know
3 they're going to fail?

4 Q. So any time you have a used roof, the
5 uplift test is going to fail?

6 A. Absolutely. Has every single time we've
7 done it. Has every single time I've seen it.

8 Q. So an uplift --

9 A. It's not a defensible test for any reason.

10 Q. So an uplift test can only be performed on
11 a new roof, is that your testimony?

12 A. No. There are companies out there that
13 will charge you \$50,000 to test old roofs.

14 Q. Well --

15 A. It isn't worth the piece of paper it's
16 written on.

17 Q. All right. Let me --

18 A. I'm just telling you.

19 Q. You can't meaningfully test a roof that's
20 not -- you cannot meaningfully perform an
21 uplift test on a roof unless it's new, is that
22 your testimony?

23 A. Let me tell you that my testimony would be
24 that if somebody were to do that and they were
25 to present that information, I think that it

1 would have a very, very difficult time of
2 making it through a Daubert challenge in a
3 court system today because of the ludicrous
4 nature of performing that type of a test under
5 ASTM, which is designed for new roofs. It's
6 a -- they're both fruit, but it's an apple and
7 an orange. All right?

8 Q. So it's your testimony that you can't
9 perform a worthwhile uplift test on an old roof
10 because it'll always fail?

11 A. Yeah, you can't -- it's not meaningful.

12 Q. Were there hail-damaged portions of the
13 roof?

14 A. No. We saw certainly areas on the metal
15 roof where debris strikes had occurred,
16 windborne debris strikes. We saw crimping,
17 which was consistent with -- and where the
18 crimping was located would be a part of the
19 roof that you couldn't walk on. So it would be
20 consistent with the roof reacting and
21 recovering, lifting up and going back down
22 again, which will cause a crimp like that to
23 occur. But no, we didn't see hail damage.

24 Q. You mentioned windborne debris strikes.
25 How old were the windborne debris strikes that

1 you observed?

2 A. They all looked new. They all looked
3 consistent with the storm event.

4 Q. What do you mean by "new"?

5 A. Well, this is a metal that is anodized.
6 It's an anodized aluminum, so it's not really
7 going to rust per se.

8 Q. Talking about the parapet or mansard
9 portion?

10 A. Yeah, I'm talking about the metals.

11 Q. Oh, that's where the windborne --

12 A. Yeah. We've got a section where there's
13 a -- you know, there's a whole area where it's
14 just scraped and just bent. It looks about
15 eight feet long, like a tree branch or
16 something went across that that's typical
17 windborne debris, which would be typical of
18 this kind of a storm event.

19 Q. Or any storm event?

20 A. Or any storm event that creates windborne
21 debris, yes.

22 Q. Let's talk about -- and I don't -- do you
23 call it a mansard or do you call it a parapet
24 wall? What do you call the -- what we're
25 calling the brown roof?

1 A. The blue roof, you mean?

2 Q. The blue roof, yes. What did I say,
3 brown?

4 A. You said brown.

5 Q. I meant blue. I apologize.

6 A. It's a mansard.

7 Q. It's a mansard?

8 A. Yeah.

9 Q. All right. What is the purpose of having
10 that mansard?

11 A. It's an architectural feature. That's all
12 it is.

13 Q. What does that mean, "it's an
14 architectural feature"?

15 A. It's a feature of the Days Inn-type chain
16 of hotels. You see them all over the country.
17 I've done a lot of Days Inn inspections. And
18 this is one of their designs back in the day.
19 Originally it had shingles on it. Originally
20 had shingles on it, and then it was covered
21 with the blue metal over the top of it.

22 Q. Okay. Is there any structure --

23 MR. CONCHIN: Wayne, let me -- I can
24 hardly hear the -- I can barely hear the audio
25 sometimes because of paper rustling. It's not

1 Tom. I'm looking at him. It's -- maybe you
2 could move a microphone away from your paper or
3 something.

4 MR. TAYLOR: No. My microphone --
5 I'm wearing my microphone and I haven't touched
6 any paper.

7 MR. CONCHIN: Okay. There's a lot
8 of paper shuffling.

9 MR. TAYLOR: Well, we'll do what we
10 can to try to cut down on that.

11 MR. CONCHIN: It's probably David
12 over there in the corner.

13 MR. LEE: I was moving some papers.
14 I'll try to refrain from that, Gary.

15 MR. CONCHIN: It just -- I couldn't
16 hear the audio, but no problem.

17 MR. LEE: But I'm not wired up on a
18 mic, but I may have mics all around me that I
19 don't know about.

20 MR. CONCHIN: Okay.

21 BY MR. TAYLOR:

22 Q. The mansard that was -- the mansard roof
23 that surrounded each of these buildings, was
24 there a structural purpose to it?

25 A. Well, it does create the overhang. It

1 creates a soffit overhang over the second-floor
2 walkway areas. You access these hotels --
3 these motels by going directly into the rooms
4 on the first floor, up a set of stairs and
5 along a concrete balcony. That roof comes over
6 the top of it and adds a measure of protection
7 to that walkway. Because it is -- and you can
8 actually see that in one of the photos that I
9 took when I was there on the 19th where a
10 section of that has fallen off. And you can
11 see the framing. And it's the -- it's the last
12 picture, the 11th picture. And it shows the
13 structural framing underneath there.

14 Q. I have a different last picture.

15 A. Oh, I'm sorry. You do have a different
16 last picture. I had to turn it over. It's the
17 11th picture in.

18 Q. I see.

19 A. Yeah.

20 Q. So it creates a little bit of an overhang?

21 A. Yes.

22 Q. And then it goes up above the elevation of
23 the roof itself?

24 A. Yes. Basically what it does is it comes
25 in as a -- it forms a triangle essentially.

1 Q. If you go to the seventh photograph and
2 also the eighth photograph, which are
3 photographs of the Knights Inn sign?

4 A. Yes.

5 Q. Were they damaged by windborne debris, was
6 the sign?

7 A. Not at the time I was there. I can't tell
8 you at the time if it was or not. This is
9 a -- I don't know if the sign was fixed or
10 replaced or what.

11 Q. Well, the sign that was there in
12 April 2019 does not exhibit any damage from
13 windborne debris?

14 A. From the ground, no, it doesn't. Yeah.

15 Q. Was the sign inspected by Jim Irmiter or
16 Adam Peiro when they were out there?

17 A. Probably not.

18 Q. So the only FBS personnel who ever were
19 out at the Knights Inn were you, Jim Irmiter
20 and Adam Peiro?

21 A. Correct.

22 Q. Mr. -- and I can never -- I can't -- I've
23 got to look at it in order to pronounce it, the
24 employee that you fired --

25 A. Neirengarten.

1 Q. Neirengarten was never out there?

2 A. I don't believe so, no.

3 Q. And Mr. Johnson was never out there?

4 A. I don't believe so.

5 Q. Is there a particular method that FBS
6 employs to performing a building inspection?

7 A. Yes. We -- and I want to see if I listed
8 it here. Sometimes it gets omitted from our
9 reports, but hopefully it's in here. Just a
10 second. We use a standard called -- it's
11 ASTM -- it's not listed in my documents -- use
12 a standard, ASTM E2128. E means envelope.
13 ASTM has a number of different committees. I
14 sat for a while on the E committee. ASTM E2128
15 is essentially a protocol for diagnosing water
16 intrusion and water damage in buildings, but it
17 covers all areas of the facade. So it covers
18 the roof, it covers the exterior walls, it
19 covers the fenestrations, windows and doors.
20 It covers foundations. And it's about a
21 75-page document that lays out an inspection
22 protocol. And we've been following that since
23 the inception of our company back in 2003.

24 Q. Has that protocol ever changed over time?

25 A. It's updated about every three years, but

1 in general it's essentially the same. It lays
2 out, you know, what photos to take, what
3 documents to try and obtain, how to interview,
4 what questions to ask stakeholders, you know,
5 maintenance people, owners, people who have
6 some idea of what the building looked like
7 before the storm can maybe attribute some of
8 the damage that may have occurred before or
9 after. To my knowledge, in reading the reports
10 that have been produced by the experts for
11 Chubb and what we have produced, nobody writing
12 a report or testifying in this matter was
13 there. So we have to rely on whatever
14 information we can get of a prebuilding
15 condition. I will tell you that a lot of times
16 we take that information down with some
17 skepticism recognizing that when somebody, for
18 example, tells me in a strip mall that they
19 have never had a leaking roof, and I walk into
20 the strip mall and I see 25 different types of
21 ceiling tiles with different designs and
22 styles, my first impression is: This thing's
23 been leaking forever. All right? So we start
24 looking for some of those signs during the
25 inspection. We document the information they

1 give us, and then we try and refute that, yeah.

2 Q. Did you inquire at Knights Inn whether
3 they had experienced or had a history of leaks
4 in the interior?

5 A. We did. I mean, obviously the reason they
6 put a roof on in '92 was because they were
7 getting some leaks from the -- you know, from
8 the flat roof. The -- they were not
9 forthcoming in terms of leak history. They did
10 not have a detailed leak history like we might
11 see in some buildings, so there wasn't a great
12 deal of information to glean from them.

13 Q. When you say there wasn't information,
14 there was no documentation or information that
15 they could provide to you, is that what you're
16 saying?

17 A. Correct. Sometimes we go and they
18 literally will give us a diary, you know,
19 somebody in room 216 complained of the roof
20 leaking above their bed, and then later it will
21 say Joe's Roofing came over and patched above
22 that area for 75 bucks or something like that.
23 We didn't have that kind of a history here.

24 Q. Did you ask for maintenance records?

25 A. Yes, we did.

1 Q. And what were you provided?

2 A. None. So I don't know if they exist. I
3 have not seen them.

4 Q. And when you were out at the site
5 yourself, were you told by anyone that they
6 never experienced any leaks?

7 A. No. They had indicated that they had had
8 some minor leaking and they could -- they have
9 maintained it. The roof was functioning prior
10 to this storm. And that would make sense with
11 a roof this age. If they had told me
12 differently, I would have probably screamed BS.
13 All right?

14 Q. When you say if they told you differently,
15 in other words, if they had said they never had
16 leaks?

17 A. Yes.

18 Q. Okay.

19 A. I would have taken that with a great deal
20 of skepticism.

21 Q. And I know that the claim is that the
22 tornado that was in the area in April 2014
23 caused damage, that that's the assertion in
24 this case. You're aware of that, right?

25 A. Yes.

1 Q. Did they indicate when they first
2 determined or noticed any damage as a result of
3 that storm?

4 A. My understanding in reviewing the file was
5 that -- this was after the fire claim had been
6 made, that the public adjustor, Mr. Howarth,
7 had indicated to them that -- and I don't know
8 if he was up inspecting the roof or one of his
9 people above the cause and origin or fire
10 location to see if there's any damage, but
11 indicated to them that there was evidence of
12 wind damage.

13 Q. So it was Mr. Howarth that had pointed out
14 to the hotel or management or somebody within
15 the hotel, with the Knights Inn that: Hey,
16 you've got wind damage up here?

17 A. Yes, that's my understanding.

18 MR. CONCHIN: Form. He said
19 Mr. Howarth or some of his people.

20 THE WITNESS: Yeah.

21 BY MR. TAYLOR:

22 Q. Do you know who Mr. Howarth informed about
23 this damage?

24 A. No, I don't specifically know the chain of
25 how that -- how he informed or who he informed.

1 Q. Do you know when Mr. Howarth or any of his
2 personnel were first out at the property?

3 A. No. I'm assuming after the fire loss.
4 If, in fact, that was the chain of events, he
5 would have gone after the fire loss, and
6 then --

7 Q. Do you know how long after the fire loss?

8 A. No, I do not.

9 Q. Do you know which came first, the fire or
10 the wind claim?

11 A. Yeah, I don't want to get mixed up here.
12 It's a lot of information. I believe the fire
13 was first, and then the wind was second.

14 Q. Okay.

15 A. Yeah.

16 Q. Do you know how long after the fire
17 someone from Mr. Howarth's company was first
18 out at the Knights Inn?

19 A. No, I do not.

20 Q. In performing an inspection of this
21 particular property, did you-all have to
22 institute a procedure or protocol different
23 than your normal procedure?

24 A. No. No, not at all. No.

25 Q. When you went up on the roof the first

1 time you visited in June of 2015, which would
2 be over a year after the storm --

3 A. Yes.

4 Q. -- is that right?

5 A. Yes.

6 Q. Did anybody go up on the roof with you?

7 A. No.

8 Q. You were by yourself --

9 A. Maintenance guy unlocked the -- he went to
10 the -- building 1 and he unlocked the lock on
11 the hatch and then said, you know: I'm going
12 to go open the other ones. I've got some other
13 stuff to do. And I told him: You don't need
14 to be with me. I mean, I don't need to be
15 babysat. And then I just closed them and
16 locked them when I was done, so...

17 Q. So you don't need a key to lock them?

18 A. No, just to -- close it.

19 Q. So whatever you did, your walk-around
20 except for the portions when the maintenance
21 man that nobody can identify was with you, you
22 were by yourself?

23 A. Yes.

24 Q. Did you speak with any other personnel for
25 the Knights Inn, maybe a general manager or any

1 other staff member besides this one maintenance
2 person?

3 A. No.

4 Q. Did you just show up when you visited in
5 June of 2015 on that first visit to do your,
6 you know, quick scoping inspection, or did
7 you -- did you just show up?

8 A. No. Mr. Howarth arranged it.

9 Q. So this was arranged ahead of time?

10 A. Yes. I gave him a time slot and --

11 Q. Because you were already in Alabama --

12 A. Yes.

13 Q. -- at the time? So you were nearby
14 anyway?

15 A. Yes.

16 Q. Did you notice that there had been --
17 whether there was evidence of any prior repairs
18 to the roof? And when I say "roof," I mean the
19 EPDM.

20 A. Yes. There had been some -- well, there
21 had been a tarp -- there was a tarp on the roof
22 when I got there. There had been some
23 mastic -- newer mastic that had been put around
24 some roof penetrations, some vents that come up
25 through the roof, basically tar. And then when

1 I got there, I did not see any evidence of new
2 patching at the seams.

3 Q. Did you see any evidence of patching at
4 the seams?

5 A. Yes. It looked like it was -- it was hard
6 to tell if that was done right after the storm
7 or if it was pre-storm. Looking at it, it
8 looked to me that it was pre-storm.

9 Q. Okay.

10 A. Yeah.

11 Q. And when you said there was newer mastic
12 around the penetrations, what do you mean by
13 "newer"?

14 A. Tar. You could tell by the color. It was
15 black, the color.

16 Q. So what does that mean --

17 A. It means it was --

18 Q. -- when you say "newer"?

19 A. -- put in -- it was put in within the last
20 year. It wasn't 20 years old. That stuff
21 changes color pretty quickly when it's exposed
22 to the sun.

23 Q. I'll just show you a photograph that we've
24 pulled up. Is this (indicating) what you're
25 talking about when you say the --

1 A. No, that's not patching. Those are water
2 evaporation zones. So depending on when that
3 photo was taken, if there was rain within
4 48 hours of that, that's what you're going to
5 see up there. This roof did not have a ponding
6 issue at all during our inspections with --
7 when you look at the code definition for
8 ponding. It does have water evaporation zones.
9 And those are going to show up as a different
10 color as that water evaporates.

11 Q. And will that show up as lighter or
12 darker?

13 A. Darker.

14 Q. So the darker areas that we see in that
15 photograph are the evaporation zones?

16 A. Yes. They're going to hold pollutants.
17 They're going to just -- they're going to be
18 darker.

19 Q. Yeah. Was -- the EPDM portion of the
20 roof, was it completely flat, or was it sloped
21 to some degree?

22 A. It is completely -- it is basically flat.
23 We measured it on every roof. We had a zero
24 count. But it does slope at the drains
25 slightly.

1 Q. And if it's showing as zero, in other
2 words, no sloping except close to the drains,
3 would that be indicative or likely that you
4 were to have some ponding issues?

5 A. Certainly would be more susceptible to
6 ponding at that point, yes.

7 Q. Because if it's designed and/or installed
8 properly, there should have been some slope for
9 the entire roof, is that right? A flat roof is
10 never supposed to be completely flat, is that
11 right?

12 A. It depends on the year of the -- when it's
13 being installed in relationship to the code.
14 '92, kind of fuzzy at that point in time,
15 doesn't really define that. Now it does. But
16 ideally, yes, a quarter inch per ten feet is
17 pretty typical of what we look for.

18 Q. And you didn't have that here, did you?

19 A. We didn't. But we also don't have -- we
20 don't have a ponding issue on this roof.

21 Q. Do you feel that the installation of the
22 EPDM roof was done in a workmanlike manner?

23 A. Yes. It was consistent with EPDM roofs
24 that I have inspected since they became
25 available for inspections in the industry. As

1 I said, I was here when the first ones came
2 out. It looked consistent with that.

3 Q. Did it drain --

4 A. Older, you know, but -- yeah.

5 Q. Did it drain well?

6 A. As I said, there's no indications this had
7 a ponding issue at all.

8 Q. Okay. The tarps --

9 A. So, yes, it clearly must have drained
10 okay.

11 Q. Okay. The tarps that you had mentioned a
12 moment ago, do you know who put the tarps up
13 there?

14 A. No, I do not.

15 Q. Did you ask?

16 A. No.

17 Q. Did either Mr. Peiro or Jim Irmiter
18 inquire who put the tarps up?

19 A. No. They reference it -- you know, it's
20 referenced in our report that that's what we
21 saw. But no, it's -- we didn't ask who put
22 them up. And there seemed to be no methodology
23 to them. So that's...

24 MR. TAYLOR: Let's take five
25 minutes.

1 Gary, we're going to take five
2 minutes.

3 MR. CONCHIN: Okay. Thank you.

4 THE VIDEOGRAPHER: We are going off
5 the record.

6 The time is 1:47 p.m.

7 (Recess.)

8 THE VIDEOGRAPHER: We are going back
9 on the record.

10 The time is 1:56 p.m.

11 BY MR. TAYLOR:

12 Q. Mr. Irmiter, when you were out for your
13 first visit in June of 2015, did you walk the
14 edge of the property to look for snapped trees
15 and those types of things?

16 A. No.

17 Q. I take it then you wouldn't have any
18 photographs that would depict any snapped trees
19 that maybe surrounded the parking lot area,
20 that type of thing?

21 A. No.

22 Q. How about Jim Irmiter and Adam Peiro, did
23 they have any photographs that would depict
24 snapped trees like on the edge of the parking
25 lot that surrounded the buildings?

1 A. I don't recall that I saw any.

2 Q. Okay. Did anyone at FBS check Google
3 Earth imagery to determine the condition of the
4 property in close proximity to the April 2014
5 storm?

6 A. Yes.

7 Q. And are you referring to something within
8 the report?

9 A. Yes. Section 1.10, Inspection Notes,
10 page 5 of 24 and 6 of 24, we have a Google
11 Earth picture before the tornado, and we have
12 one after the tornado showing a large denuded
13 area south of the -- or not -- north, south --
14 well, below the property.

15 Q. But not on the property itself?

16 A. No. But we do show -- interestingly
17 enough, we show a building right to the right
18 of the property that has one, two, three new
19 roofs. We show a building further down from
20 them that has one, two, three, four new roofs.
21 So they are directly in line with the property,
22 and they all have new roofs.

23 Q. Have you ever experienced or just in many
24 of the investigations that you've done where
25 you can have a structure that's heavily damaged

1 as a result of a tornado and directly across
2 the street there's no damage at all?

3 A. I saw that in Joplin, saw that in
4 Birmingham and Tuscaloosa.

5 Q. So that's -- so basically it's -- you
6 know, if the tornado's not in the path, then
7 there's a chance that there's no damage at all?

8 A. Even if the tornado is in the path. I've
9 had plenty of inspections where I've got two
10 houses destroyed on either side and the house
11 in the middle looks like it was never touched.
12 So the dynamics of the wind that occur with
13 tornados are -- continue to baffle all of us.

14 Q. Okay. In this Google Earth imagery,
15 date -- the photograph that's on page 6 of
16 24 --

17 A. Yes.

18 Q. -- which would be approximately ten months
19 after the tornados were in the area?

20 A. Yes.

21 Q. Are there tarps over the Knights Inn
22 buildings?

23 A. You can't tell from this photo.

24 Q. Did you -- the way I understand Google
25 Earth imagery, you can kind of play with it and

1 get different angles and you can do close-ups,
2 you can zoom in, that type of thing, right?

3 A. Sometimes you can, yeah. There was no
4 evidence of -- on this photo I can't tell,
5 yeah. I would have to go back to Google Earth
6 and see if that's available, but --

7 MR. LEE: Which one are you
8 referring to?

9 MR. TAYLOR: We're looking at the
10 photograph that's on 6 of 24 with a date of
11 February 6, 2015.

12 BY MR. TAYLOR:

13 Q. I'm looking at both photographs, the one
14 that's page 5 of 24 of your report --

15 A. Yes.

16 Q. -- and then the one that's on page 6 of
17 24. Specifically with regard to the Knights
18 Inn, I'm not seeing any discernable differences
19 in those two photographs of the Knights Inn
20 property. Would you agree with that from what
21 these two photographs show?

22 A. Yes.

23 Q. And one is before the storm and one is
24 after the storm?

25 A. That is correct with these photographs.

1 Q. Let me show you -- we've just pulled up
2 the Google Earth imagery, and it's a close-up
3 of the February 6, 2015, photograph that's in
4 your report. Do you see any tarps?

5 A. This looks like the tarp location that we
6 saw when we got there and when I got there,
7 right there.

8 Q. Is there a tarp there now?

9 A. That looks to me like a tarp, yes, in that
10 location. I'd need my photos to look at. But
11 it looks like the same color of the tarp that
12 was there.

13 Q. What color --

14 A. It's a gray tarp.

15 Q. It's a gray tarp?

16 A. Yeah.

17 Q. We've zoomed it in a little bit further.
18 Are you talking about the one that has the gray
19 color or the dark color?

20 A. This right there (indicating), yeah.

21 Q. And you believe that that's a tarp?

22 A. Yeah. Let me take a look again here.

23 So -- oh, I guess I can't move it. I would
24 need my photos to look at that are -- that we
25 took. I believe that is the same location as

1 the tarp that we saw --

2 Q. Okay. Is that --

3 A. -- when we were down there.

4 Q. Is that the only tarp that you had seen
5 was in one location?

6 A. Yes.

7 Q. On all three roofs?

8 A. Yes. And I will tell you that there's a
9 distinct difference between what we saw, what I
10 saw when I was there, what our -- my two
11 inspectors took photographs and then Mulder's
12 photographs. Mulder has large areas of white
13 elastomeric that were installed. He inspected
14 after us. So there's clearly signs of
15 attempted mitigation and repair, temporary
16 repair that was being done even after we
17 inspected.

18 Q. And the one tarp that you indicated you
19 believe you saw in the gray area, that is in
20 the building that houses the office --

21 A. Ballroom.

22 Q. -- the ballroom --

23 A. Yeah.

24 Q. -- the restaurant, that building?

25 A. Yes.

1 Q. Okay. And that is the -- and that is the
2 only tarp on that one building?

3 A. Yes.

4 Q. And you did not see any tarps on either of
5 the other two buildings?

6 A. Correct.

7 Q. And this is in February of 2015?

8 A. According to that --

9 Q. According to the photographs?

10 A. -- photograph, yes, that you just showed
11 me.

12 Q. Okay. Which is about ten months after the
13 tornado?

14 A. Yes.

15 Q. Have you obtained any wind speed data at
16 the Knights Inn specifically on the date of
17 April 28, 2014?

18 A. Only what's in our report.

19 Q. And where within your report is there data
20 indicating the actual wind speeds at the
21 Knights Inn specifically?

22 A. Oh, it doesn't. I'm sorry. We do not
23 have site-specific wind data at the Knights
24 Inn.

25 Q. Okay.

1 A. Yeah.

2 Q. And the information that you looked at
3 yesterday that you're going to provide, the
4 SWDI -- did I do that right?

5 A. Yes.

6 Q. Report, will that have site-specific wind
7 speed data for the Knights Inn on that date?

8 A. There is a subset to those reports that I
9 showed you where I can link them to another
10 part of the SWDI and it will give me any wind
11 speeds that were phoned in by the general
12 public, which is considered unreliable by NOAA,
13 or by a trained weather spotter or by law
14 enforcement. So if, in fact, anybody called in
15 anything, there will be a chart of that. There
16 may be one. There may be 25. I can hit each
17 one of those and it will give me a point on the
18 map of where that's being called in, yeah.

19 Q. What does SWDI stand for?

20 A. Severe Weather Data Inventory. This is
21 the after-action report that is utilized by
22 NOAA.

23 Q. Let me make sure I have this correctly.
24 Severe Weather Data Inventory?

25 A. Yes.

1 Q. Okay. And when you looked at the SWDI
2 reports yesterday, you did not look for wind
3 speeds at the Knights Inn property
4 specifically? You hadn't done that yet? You
5 were talking about a report you could do, but
6 you hadn't done it yet, is that right?

7 A. No, I haven't done that yet. Yeah.

8 Q. So as you sit here today, you don't have
9 any data that indicates the wind speeds at the
10 Knights Inn property specifically on April 28,
11 2014?

12 A. Well, I'll go better than that and I'll
13 tell you that, for the record, no one will have
14 that data. It does not exist unless someone
15 sat on that roof with an anemometer during that
16 storm event and recorded the wind speeds. Wind
17 speeds are generally taken from the closest
18 weather station, the airport, something like
19 that. So wind speeds are very, very difficult
20 to pinpoint accurately at a specific location
21 because of that.

22 Q. And I just want to confirm. You were not
23 present when Adam Peiro and Jim Irmiter did
24 their inspection in July 2015?

25 A. That is correct.

1 Q. Is Jim Irmiter a professional engineer?

2 A. No.

3 Q. Is he a certified industrial hygienist?

4 A. No.

5 Q. Is he an architect?

6 A. No.

7 Q. Is he a licensed general contractor?

8 A. No.

9 Q. Is Adam Peiro a professional engineer?

10 A. No.

11 Q. A licensed engineer, I should say?

12 A. No.

13 Q. Is he a certified industrial hygienist?

14 A. No.

15 Q. Does he hold a general contractor's
16 license?

17 A. No.

18 Q. Okay. Does Jim Irmiter hold a building
19 official license?

20 A. No.

21 Q. Does Adam Peiro hold a building official
22 license?

23 A. No.

24 Q. What licenses -- and I don't mean a
25 driver's license -- does Jim Irmiter possess?

1 A. None that I'm aware of.

2 Q. What certifications does Jim Irmiter
3 possess?

4 A. You would have to look at his -- I know
5 he's got some mold certification classes he's
6 taken. He's taken some -- a couple fire
7 certification classes as well, but I can't
8 remember. And I think Adam has the same ones.
9 And then Jim is a level three Xactimate
10 estimator as well.

11 Q. An accreditation or certification that he
12 did not use in this case?

13 A. Correct.

14 Q. If we look at page 1 of 24 of your report
15 that we've marked as Defendant's Exhibit 32 for
16 identification --

17 A. Yes.

18 Q. -- in section 1.1.1, we list off four
19 links to websites.

20 A. Yes.

21 Q. Did you actually review and open up those
22 links and look at them?

23 A. Yes. They are just -- it's either a
24 narrative -- it's either a narrative or it's a
25 video depending on the link that you go to.

1 Q. Did any of these links relate specifically
2 to the Knights Inn property?

3 A. No.

4 Q. It was more generalized about the weather
5 conditions just in the general area?

6 A. Yes. Did something happen that day in the
7 general area.

8 Q. In the photograph that's on page 6 of 24,
9 in the caption it says, "Large area of trees to
10 east and south gone."

11 A. Yes.

12 Q. You say -- when you say to the east and
13 south, are you talking about to the east and
14 south of the Knights Inn property?

15 A. Yes.

16 Q. You're not talking about trees being
17 downed or gone on the Knights Inn property as a
18 result of the storm, are you?

19 A. No. We can't tell from this photo, either
20 one of these photos. What we're talking about
21 is this area. If you want, I can circle it,
22 but it's right here (indicating).

23 Q. Is it at the golf course or to the east of
24 the golf course? Is that not what we're
25 looking at?

1 A. Yeah. It's the golf -- it's the golf -- I
2 mean, it's the golf course.

3 Q. So you're talking about trees being downed
4 on the golf course?

5 A. Yes. Well, and there is trees -- yeah,
6 there's trees here. I mean, there's -- yeah,
7 you can look at the photos and see. The place
8 is denuded. It parallels the description that
9 is listed in the NOAA events database where it
10 says, "The tornado continued on its northeast
11 path near Frank House Municipal Golf Course
12 where the clubhouse was destroyed, snapping and
13 uprooting trees." I mean, that's the golf
14 course we're talking about. It's right here.

15 Q. What about the wooded area to the
16 immediate south of the Knights Inn?

17 A. That's the escarpment that I talked about.
18 That's a hill. That looks about the same on
19 these photos. It honestly appears to have done
20 this. It appears to have come down, gone
21 around like that in terms of the way the --

22 Q. Gone around what?

23 A. The backside of the hotel.

24 Q. So off the property?

25 A. Yes.

1 Q. On page 6, what do you mean when you are
2 talking about exposure categories at 6.5, 6.3?
3 What does that mean?

4 A. Within the building code, when you are
5 designing a building, you have to design the
6 building based on the exposure of the building.
7 There are three categories. There used to be
8 five, now there's three. Exposure B would be
9 what's called a residential area where there's
10 tree cover. Exposure C would be open terrain,
11 a certain number of square footage of open
12 terrain on one -- at least one side of the
13 building like a big, large open field.
14 Exposure D is typically at least a mile of open
15 water or open field in front of the building.
16 Essentially what that means is that the effect
17 of the wind load will be much higher in
18 exposure D or exposure C. Exposure B there
19 will be less wind load effect.

20 Q. Is that just because of the terrain?

21 A. Yeah, the terrain.

22 Q. The trees?

23 A. The trees, exactly. The wind filters
24 through that.

25 Q. So this wooded area that's to the south of

1 the Knights Inn property provides it with some
2 degree of protection from the winds?

3 A. It does, but it is an escarpment as well,
4 which is a hill. So in that situation, what
5 happens is is the wind hits, it will bounce
6 over the hill and it will hit what is on the
7 other side of the hill, which would be -- the
8 sweet spot would be this particular hotel. And
9 so in that situation, that escarpment, even
10 though it's an exposure B, could raise it to an
11 exposure C level.

12 Q. With the tornado moving from the northwest
13 to the southeast, is that the direction it was
14 going?

15 A. I believe so, yeah. I think it says
16 northeast.

17 Q. And the path of the tornado stayed to the
18 west of the Knights Inn property, is that
19 right?

20 A. Yes.

21 Q. And, in fact, stayed to the west of the
22 wooded area to the south of the Knights Inn
23 property?

24 A. Yes.

25 Q. And also stayed to the west of the trees

1 that are immediately west of the Knights Inn
2 property?

3 A. Yes.

4 Q. You made -- you testified earlier that
5 the -- EPDM, that the glue was gone. Are you
6 sure the glue was ever -- that it was ever
7 fastened down with glue in the first place?

8 A. Yeah, it was. One of Mulder's pictures
9 is -- I don't know if he just didn't examine it
10 correctly or he doesn't know about how EPDM
11 roofs are installed. But he shows a picture
12 where he's holding up a flap. And I took the
13 picture, I blew it up, it's clearly got glue on
14 it. That was adhered. I don't think he
15 understands how that failure mechanism occurs
16 at an EPDM glue joint, but it certainly was
17 glued and shows glue. On our test cuts when we
18 open them up, you can see the glue there, and
19 you can see that it's loose all the way around
20 them.

21 Q. Is it possible that the glue that had
22 originally been holding it down had just
23 deteriorated and it was just no longer serving
24 its purposes as an adhesive?

25 A. It's possible. But again, as I said,

1 there's no ballooning of this roof that
2 occurred. That typically is what happens when
3 that occurs. So didn't see that collateral
4 sign.

5 Q. You had made the statement in your report
6 on page 6 that the roof is unballasted. What
7 do you mean by that?

8 A. There is no rock ballast on it.

9 Q. What do you mean?

10 A. Well, sometimes EPDM roofs or any membrane
11 roof will be held down with rock ballast. We
12 can go over to the window here and I can point
13 out multiple buildings that have a rock ballast
14 on them.

15 Q. Put it down and then like a coating of tar
16 with rock in it?

17 A. No, there's no tar.

18 Q. It's just loose --

19 A. Just loose-laid rock.

20 Q. Okay. We don't have that here?

21 A. We don't have that here.

22 Q. Is that normal?

23 A. Well, that means it's a fully adhered
24 system. If I had a ballasted roof, I wouldn't
25 fully adhere it. The rock is holding it down

1 from uplift.

2 Q. So if it was not fully ballasted, you
3 would put the rock in and you would maybe only
4 ballast in certain places --

5 A. No.

6 Q. -- edging?

7 A. You either fully adhere --

8 Q. Yes.

9 A. -- or you fully ballast. You typically
10 don't mix the two. This is a fully adhered
11 roof, meaning it was glued down. There is no
12 additional ballast on it.

13 Q. So if it's ballasted, there's no adhesive?

14 A. Typically not, except at the seams, at the
15 seams where you're gluing your seams down.

16 Q. I think you indicated on page 6 that you
17 could not determine the substrate of the
18 Polynesian roof, is that right?

19 A. Well, we know it's shingles. I know from
20 my visit down there that it is wood now. You
21 can see it in my photos. It's plywood.

22 Q. When you say Polynesian roof, you mean
23 parapet walls, right?

24 A. Yes.

25 Q. And I think we talked about this, the

1 parapet walls were six to seven feet tall?

2 A. Yes.

3 Q. From the -- from when you were -- if you
4 were standing on the EPDM portion of the roof?

5 A. Yes.

6 Q. Will the parapet walls in any way change
7 how the wind impacts the roof?

8 A. Sure. Absolutely. It's called a Bernouli
9 effect. When you walk through downtown here,
10 you're walking along a street, you feel no
11 wind, you get to the corner and the wind knocks
12 you down. It's the dynamics of wind as it
13 moves through buildings, as it moves through
14 different types of structures. In this case,
15 it certainly could have had an effect of
16 creating a bit of a wind tunnel with that large
17 slope down inside there creating more suction
18 on the roof. Without the parapets, the wind
19 would roll across the roof. Here it could have
20 a tendency to come down and then suck back up
21 again.

22 Q. So without -- if we didn't have the
23 parapet walls, we just had the flat roof, the
24 wind would just come right across?

25 A. Correct.

1 Q. And what you're saying is if we've got the
2 parapet walls, it's going to come in, and
3 because it's an obstruction, the wind is going
4 to go up and over the parapet walls --

5 A. Yes.

6 Q. -- and then it's going to come back
7 down --

8 A. Absolutely.

9 Q. -- right after?

10 A. Absolutely it could. If you look at the
11 dynamics of wind studies and you look -- these
12 are even in the building codes -- and you look
13 at wind uplift issues, yes, that can absolutely
14 occur. We didn't measure it. We didn't try
15 and recreate it, but it could happen.

16 Q. Is it also possible that it goes up over
17 the parapet wall and then just stays up at that
18 level?

19 A. Could, sure.

20 MR. CONCHIN: Object to the form.

21 MR. TAYLOR: I'm sorry, Gary?

22 MR. CONCHIN: I said object to the
23 form; what was possible.

24 MR. TAYLOR: Well, he said both were
25 possible, so that's all.

1 MR. CONCHIN: I don't know of any
2 legal standard that is possible.

3 BY MR. TAYLOR:

4 Q. So what you're saying is that with a
5 parapet wall, wind going up over that could
6 have more of an impact or less of an impact on
7 the roof down below, is that right? Could be
8 either one? It could be either one, right?

9 A. Or not.

10 Q. Or none?

11 A. Yeah.

12 Q. So as I was saying, could impact it or not
13 impact it?

14 A. Right. That would need to be measured.

15 Q. And you didn't do that here?

16 A. No. Let me answer it this way. We
17 know -- for example, up here in Minnesota we
18 design for something called snowdrift load on a
19 roof that has parapets like this. So if this
20 were up in Minnesota and we had a snowstorm up
21 here with ten or 15 inches of snow and we had
22 wind, which we get, even a 40-mile-an-hour
23 wind, I would expect that if the Knights Inn
24 were sitting outside and we went there the next
25 day, we would see the center of the roof with

1 no snow on it at all, and we would see snow
2 three to four feet high all the way around the
3 edges because of the dynamics of how the wind
4 affected that roof. We see it all the time.
5 So if that happens with snow, why wouldn't it
6 happen with just regular wind?

7 Q. What you're saying is --

8 A. It certainly would.

9 Q. You're saying it can happen?

10 A. Absolutely.

11 Q. Okay. You're also saying it may not
12 happen, right?

13 A. Correct.

14 Q. At the bottom of page 6, you talk about
15 the mechanically damaged metal roof panel in at
16 least one location.

17 Do you see that at the bottom?

18 A. Yes.

19 Q. What do you mean by "mechanically
20 damaged"?

21 A. Somebody -- it looked like a tool had
22 damaged it. It was torn and rusted. It was
23 one piece of rusted material we saw. We took a
24 picture of it. That was there before the
25 storm. It couldn't have rusted that quickly.

1 Q. On the top of page 7 you indicate, "Small
2 water pools on the roof."

3 Do you see that?

4 A. Yes.

5 Q. Do you mean ponding?

6 A. No, I do not; absolutely not.

7 Q. So what do you mean by -- so you're not
8 talking about ponding water?

9 A. Just a second. So the definition of
10 ponding is that the water sits on the roof for
11 48 hours after a rainfall. And depending on
12 the slope of the roof, you then go to any
13 remaining standing water and you measure it.
14 And depending on the depth of that water, then
15 it will fit the definition of ponding or not.
16 You also look for what are called water
17 evaporation zones. In other words, is the
18 water showing signs that it is, in fact,
19 evaporating. In this case, we had rain on
20 July 4th, record rainfall right before our
21 inspection. We were on the roof in less than
22 48 hours and we saw some standing water areas.
23 That does not fit the definition of ponding.

24 Q. Because it had not yet been 48 hours?

25 A. Correct.

1 Q. So if you came back two days later and it
2 was still there, then it would be called
3 ponding?

4 A. Depending on the depth. We didn't have --
5 there is no place on this roof that had a depth
6 of more than a half inch.

7 Q. So in order for it to be characterized as
8 ponding, then it has to be 48 hours and it has
9 to be at a certain depth?

10 A. Right. And the reason for the depth is
11 the weight. The concern with ponding is quite
12 frankly a structural issue. If am going to
13 add -- if I got a huge dip in the roof and I
14 fill it with four inches of water, I'm going to
15 overload that roof and I could cause a
16 collapse. These roofs just did not demonstrate
17 any of that.

18 Q. You noted some T-peeling?

19 A. Some what?

20 Q. T-peeling on the roof.

21 A. Where is that?

22 Q. Did I misread?

23 A. Tape maybe?

24 Q. No. "There were some areas where the
25 seams had become at least partially unsealed

1 similar to T-peel where two pieces of membrane
2 overlap and are sealed/joined to each other
3 during the installation."

4 A. Oh, sorry. Yes. T-peeling, yes.

5 Q. Is that T-peeling?

6 A. Yes.

7 Q. And where exactly was this, at the seams?

8 A. Yes.

9 Q. Is it possible that this peeling of the
10 seam could have been caused by glue not having
11 been properly applied during installation?

12 A. Oh, sure. Anything is possible, yeah.

13 Q. Is it possible the peeling of the seams
14 could be distributed to age-related
15 deterioration of the roof?

16 A. Yes. But again, I would expect then at
17 that point in time to see this roof showing
18 wrinkling and showing fatigue, and it didn't
19 show that.

20 Q. Is it possible that the peeling of the
21 seams could be attributed to a lack of
22 maintenance?

23 A. No. That's typically not what -- that
24 doesn't have anything to do with T-peel.

25 Q. So it's not maintenance, but it could be

1 age related?

2 A. Yes.

3 Q. And it could have been improper
4 installation?

5 A. That can attribute to it. I didn't see
6 any -- I've already testified I did not see any
7 improper installation issues on this roof.

8 Q. How did you know that the seams were
9 broken completely?

10 A. How did we know they were broken
11 completely?

12 Q. Yes.

13 A. There is a couple of them in the photos
14 that we lift up, and he could see they were
15 open completely.

16 Q. How many did you lift up where they were
17 broken completely?

18 A. I'd have to look at my photos again, the
19 photos.

20 Q. Well, you reviewed them in order to
21 prepare for your deposition. Was it more than
22 five? Was it two? How many? What's your best
23 recollection?

24 A. Well, there's certainly seam failure at
25 the intersection of the parapet and the low

1 slope roof. There is no question. Mulder even
2 shows that.

3 Q. Where they were completely broken?

4 A. Completely debonded, absolutely. One of
5 Mulder's pictures you could see where the
6 membrane that's coming up comes up about an
7 inch and a half, and there's an opening right
8 there where any water -- any water on that roof
9 is going to go right into that opening.

10 Q. How many, though?

11 A. I'm not going to speculate. I would want
12 to look at my photos; more than one and less
13 than ten per roof.

14 Q. Okay. Did you observe any failed seams?

15 A. Yes.

16 Q. Did you observe any seams that were not
17 intact?

18 A. Yes.

19 Q. And I think you indicated -- there was a
20 mention on page 7 about hail damage, but you
21 didn't note any hail damage, is that right?

22 A. No.

23 Q. If you turn to page 8 of your report,
24 there is a picture of a core cut?

25 A. Yes.

1 Q. Who performed this core cut?

2 A. That would have been Jim or Adam.

3 Q. You didn't do this?

4 A. No. No.

5 Q. Do core samples differ from square
6 samples? What is the reason for taking a core
7 sample?

8 A. What's the difference for taking a core
9 sample?

10 Q. What is the benefit of taking a core
11 sample?

12 A. The core sample will tell you the
13 composition of the roof assembly, and it will
14 also tell you the condition of the roof
15 assembly at that specific location.

16 Q. And you are not familiar with the term
17 "square sample"?

18 A. I'm familiar with a square sample.

19 Q. What is a square sample?

20 A. Well, square sample -- well, I'm familiar
21 with its use in two terms. One, a square
22 sample would be if you, for example, were
23 looking for hail on a shingled roof, you would
24 mark out a ten-by-ten area, which is a square,
25 and you would circle the number of hits that

1 you find inside that square. And that would be
2 a test sample or a sample square for
3 documenting hail damage. If you, in fact, were
4 going to test a roof -- a section of roof
5 membrane, for example, modified bitumen or
6 built-up roof for damage from hail, you could
7 cut out a 12-inch-by-12-inch section and do a
8 desaturation test on that particular product to
9 see if, in fact, there is evidence of damage to
10 the mat from hail.

11 Q. In the photograph of the core cut on
12 page 8 of your report, you see some white
13 material that's depicted?

14 A. Yes.

15 Q. What is that?

16 A. That's lightweight insulating concrete.

17 Q. What is lightweight insulating concrete?

18 A. Exactly what it says. It's a lightweight
19 concrete. It's porous. It is used for two
20 purposes. One, it adds some insulating value
21 when it's first installed. It's about an R3.
22 And it also can add some weight to the roof to
23 provide uplift protection to the structural
24 component underneath.

25 Q. I wanted to just ask you a question.

1 Underneath the photograph it says,
2 "60-millimeter EPDM single-ply."

3 A. Yes.

4 Q. Did you mean to say 60-milL, lowercase "m,"
5 lowercase "i" and a capital "L"?

6 A. Yeah.

7 Q. Which is a unit of measure where one mil
8 equals 1/1,000th of an inch, is that right?

9 A. Yes.

10 Q. So that's actually a typographical error?

11 A. Yes, all the way through. It's a 60 mil.
12 There's 40 mil, there's 60 mil, there's 90 mil.

13 Q. Okay. Not millimeter?

14 A. Correct.

15 Q. How is the roof on building number 1
16 constructed?

17 A. It's metal or steel trusses. It's a metal
18 B deck. It has two inches of lightweight
19 concrete. And then over the top of that is a
20 fiberboard material. Then there is a built-up
21 roof. And then there is the EPDM put over the
22 top of that. So it essentially has two layers
23 of roofing on it.

24 Q. So it's not lightweight insulated concrete
25 with multiple-ply asphalt roof, the old roof

1 over it, half-inch wood fiber insulation board
2 with the EPDM over it?

3 A. Not according to the core cuts on building
4 1.

5 Q. Fair enough.

6 A. Now, if somebody else cored it in a
7 different location, they could certainly find
8 multiple layers, particularly if in the old
9 roof that was a location where they were
10 patching. So that would make sense. We see
11 that all the time. In the locations that we
12 cut, this is what we found.

13 MR. TAYLOR: Let's go off the record
14 for just a minute.

15 THE VIDEOGRAPHER: This marks the
16 end of media unit number 3.

17 We are going off the record at
18 2:33 p.m.

19 (Recess, where upon Mr. Lee leaves
20 the deposition.)

21 THE VIDEOGRAPHER: This begins media
22 unit number 4.

23 We are going back on the record at
24 2:42 p.m.

25 BY MR. TAYLOR:

1 Q. All right. Mr. Irmiter, let's go through
2 maybe one more break and then I think we might
3 be able to get this finished. How does that
4 sound? It is what it is, right?

5 A. It is what it is.

6 Q. Do me a favor. Review with me one more
7 time the construction of the roof in
8 building 1. I want to write this down.

9 A. Well, I'm going to go on record as saying
10 that we have --

11 Q. Based on your core cut.

12 A. Well -- but I don't have all of my photos
13 in front of me. Core cut number 1 in our photo
14 log would be represented by about ten photos,
15 which I could analyze and give you more
16 information. But based on the information in
17 front of me, it's a 60-mil EPDM. It's over a
18 half-inch recovery board, which is a fiberboard
19 material. There is an existing roof membrane,
20 which is a built-up roof. I don't know the
21 number of plys, so it may have been recoated
22 over the years. And then there's two inches of
23 lightweight insulating concrete at this
24 particular core cut location.

25 Q. So -- and do the core cuts indicate

1 different composition anywhere else, the other
2 core cuts that were taken?

3 A. Yes. Building number 2, core cut 1 has a
4 different composition.

5 Q. We'll get to that in a minute. Let's just
6 deal with building number 1 first. So if I
7 understand correctly, in order for there to be
8 a leak in this roof in the vicinity where core
9 cut number 1 is, you would have to -- it would
10 have to go through the two inches of
11 lightweight insulating concrete, the existing
12 built-up roof, the half-inch recovery board and
13 the EPDM, is that correct?

14 A. Yes. And it would need to then find its
15 way through an opening in the metal roof deck
16 at a puddle weld or a hole or an opening or at
17 a seam. So, for example, if we went to the
18 inside of the building above core cut number 1,
19 and let's say this was a second-floor unit, and
20 there was water damage on the ceiling directly
21 above this cut, we would not necessarily
22 attribute it to this particular cut because the
23 entry point on the exterior and the exit point
24 on the interior, because these are 50-foot-long
25 metal panels, can be up to 50 feet different.

1 Q. Understood. But in order for there to be
2 a leak, say, at this point where the cut is,
3 for example, you would have to have an opening
4 of the EPDM, the half-inch recovery board, the
5 existing built-up roof, the two inches of
6 lightweight insulating concrete and then the
7 metal -- what did you say --

8 A. B deck, the metal, the structure deck.

9 Q. And then the metal deck, right?

10 A. Yes. Yes.

11 Q. So you would have to have a leak at all
12 five of these in order for there to be water
13 damage, right? In other words, you have to
14 have an opening at all five in order for there
15 to be a leak there?

16 A. Yes. But if the leak is coming -- this
17 one was taken 20 feet from the north wall and
18 15 feet from the east wall. So if they are, in
19 fact, at the parapet wall at the 20-foot mark,
20 if that seam is opened up and water gets
21 underneath and it runs along there, this would
22 be a point where it would enter or anywhere
23 along that location. One would assume that --
24 and this is also one of the things that was
25 reported to us, was that does leaking occur as

1 soon as it rains? And the answer to that was
2 consistently no. Leaking begins to occur after
3 the rain or after it rains for a while. So it
4 takes a while for the rain to get through this
5 assembly and come into the building. If there
6 was a functional hole in the roof, if a tree
7 limb had gone through the roof in the hole, it
8 would leak instantly when it rains. That
9 doesn't occur here because of these multiple
10 layers and the lightweight concrete. That's
11 very consistent with leak patterns with this
12 type of roof when it occurs. That's why they
13 are very, very hard to diagnose.

14 Q. I guess the point being that in order for
15 there to be a leak, you have to have an opening
16 at every layer?

17 A. No, you don't. Because you would --

18 MR. CONCHIN: Object to the form.

19 THE WITNESS: So here's my EPDM
20 membrane. Okay? Beneath that is my
21 (indicating) fiberboard material. Fiberboard
22 material comes in four-foot-by-eight-foot
23 sheets. So it's hard for the water to get
24 through that fiberboard material here until it
25 becomes saturated and mush. But it certainly

1 could come in at the seam. So if water comes
2 in and it hits the seams between here, that's
3 one point where it's going to enter. Now it's
4 going to hit what remains of that built-up
5 roof. It's got to find an opening in that
6 built-up roof to go to the next layer. But the
7 built-up roof is multiple layers. So it could
8 get here through one seam, and then it could go
9 over here to another seam. So it's virtually
10 impossible to figure out where that is.

11 BY MR. TAYLOR:

12 Q. I'm not asking for you to determine the
13 source of where the water entered. I guess the
14 point I'm trying to make, though, is that in
15 order for water to finally enter the interior,
16 you know, like a ceiling leak, ultimately it's
17 going to have to get through all five of these
18 layers?

19 A. Yes. Absolutely. Yep.

20 Q. There has to be an opening -- however it's
21 caused, there has been to be an opening at each
22 of the five layers for water to get through?

23 A. It would be physically impossible if that
24 didn't occur, correct.

25 Q. On page 9 of your report, you identify

1 four rooms here. Are these the only four rooms
2 where you identified water damage?

3 A. Well, they're really the only four rooms
4 in that unit. I mean, there's -- so we have
5 the lobby, which is kind of the big open area
6 as you walk in. You have the ballroom. You
7 have the office. And then you have the men's
8 room and the women's room. Those are really
9 the only rooms in that -- in building 1 --

10 Q. Was there --

11 A. -- other than hallways and things like
12 that.

13 Q. Was there any patching on the roof of
14 building 1?

15 A. I would have to look at the photos again.
16 Again, you're asking me to pull that out of my
17 memory. And I know you don't have the benefit
18 of the photos. I don't either, but --

19 Q. I had no way of knowing that -- I'm
20 assuming I got the photographs that Gary is
21 talking about. I don't know that I got them,
22 but I'm assuming that we did. But we did not
23 have any information that they actually were
24 part of your report.

25 A. I believe building 1 is where the tarp was

1 installed.

2 Q. In one small area?

3 A. That's -- no. The tarp that we saw was
4 ten-by-ten. That's a good-size area.

5 Q. How big was the roof of building 1?

6 A. Square footage-wise, it's -- well, the
7 total square footage is 78,000 square feet. So
8 if they were all equal, it's 25,000 square
9 feet.

10 Q. And the tarp was?

11 A. Ten-by-ten, hundred square feet.

12 Q. Hundred square feet?

13 A. Yep.

14 Q. So just a fraction of the entire roof?

15 A. Yes.

16 Q. Were there any bubbles on building 1?

17 A. Any what?

18 Q. Bubbles.

19 A. Yes. There were bubbles on all three
20 roofs, yeah. If I can add; one of the
21 disadvantages that I think that Mulder had when
22 he inspected is we had the maintenance person
23 up there during this inspection when we saw --
24 you know, we lifted up seams, we took pictures
25 of all of those. They are well documented.

1 Mulder gets on the roof and every single one of
2 those is now covered with a white elastomeric.
3 So he would have a very difficult time giving
4 an opinion, in my mind, of what that condition
5 would have been other than looking at our
6 photos.

7 Q. And the white elastomeric was added after
8 Jim Irmiter and Adam Peiro did their
9 inspection?

10 A. Yes, by the maintenance guy. Yeah.

11 Q. If you look at page 9 of your report, the
12 core cut, the photograph of the core cut --

13 A. Oh, yes, up at the top.

14 Q. Okay. And what is the construction of the
15 roof here that we're looking at? And again,
16 60 millimeters is actually 60 mil, right?

17 A. Yeah, 60 mil EPDM. Again, the half-inch
18 fiberboard and then the roof membrane that we
19 talked about.

20 Q. The existing roof?

21 A. Yeah, that existing built-up roof
22 material. And then there is another
23 material -- it's a tan cementitious material.
24 We think it's just discolored. That's why it's
25 tan. That's probably just a hot mop that was

1 put -- hot mop tar that was put on. So, in
2 other words, the built-up roofing separated,
3 the layers, when we pulled it out. And then
4 there's lightweight concrete.

5 Q. And then is there also a metal deck
6 underneath?

7 A. Yes.

8 Q. So if I counted correctly, that's six
9 layers on this one?

10 A. Six individual, yes. Yep.

11 Q. And again, to have a leak, there would
12 need to be an opening at all six of these
13 layers?

14 A. Yes. And a lot of water.

15 Q. So the only difference between what we're
16 seeing in roofing systems from building 1 to
17 building 2 is the addition of this sand
18 cementitious material?

19 A. No. This is still building 1.

20 Q. Oh, I apologize.

21 A. Yeah. This is still building 1.

22 Q. Okay. So we're looking at a different
23 type of roof at a different portion of the
24 roof?

25 A. No. We're looking at -- it's exactly the

1 same type of roof. It's just that the built-up
2 roof material separated differently on removal.
3 It's exactly the same assembly in both
4 locations.

5 Q. All right. With regard to building 2,
6 we've got a core cut on page 10?

7 A. Yes.

8 Q. And explain the different layers that
9 we're looking at here.

10 A. In this particular case, we have the EPDM,
11 we have the half-inch fiberboard, we have
12 previous roof membrane that's been left in
13 place, which is the built-up roof, and then we
14 have two inches of foam insulation, and then we
15 have two inches of lightweight concrete, and
16 then we have the metal deck. So we have the
17 introduction of two inches of foam insulation.
18 That type of insulation would not have been
19 commercially available in circa 1970s when this
20 work was originally done. So this roof was
21 redone at some point in time. The lightweight
22 concrete is likely original; everything else
23 would have been new at some point. It still
24 has two layers of roofing, but there's no way
25 that that yellow material that you see in hand

1 right there could have been installed. It
2 wasn't available.

3 Q. This on building 2 is six different
4 layers?

5 A. Yes.

6 Q. And once again, in order for there to be a
7 leak that gets into the interior, there would
8 have to be an opening at each of the six
9 different layers?

10 A. Yes.

11 Q. Were there any rooms in building 2 that
12 showed damage?

13 A. Just a second. I can't -- I can't recall.
14 I'm just trying to look here. Building 2, we
15 don't show any in our report.

16 Q. And just for the record, because I only
17 asked about the first core cut on building
18 number 1, did you perform any of these core
19 cuts yourself?

20 A. No. I will stipulate that none of the
21 core cuts in this report were performed by me.

22 Q. If you turn to page 11 of your report that
23 we've marked as Exhibit 32 for identification,
24 and we're now talking about building 3?

25 A. Yes.

1 Q. And we're showing a core cut there, core
2 cut number 1?

3 A. Yes.

4 Q. Could you again explain how -- the
5 construction of the roof based on what you find
6 in core cut number 1?

7 A. Yes. It's identical to the core cut that
8 was performed in building number 2.

9 Q. So six different layers?

10 A. Yes.

11 Q. All of which would have to have an opening
12 in order for water to get through all the way
13 to the interior?

14 A. Yes. All of which were wet as well like
15 all of the other core cuts.

16 Q. And what are we looking at with core cut
17 number 2 on that page?

18 A. Core cut number 2, we have the same
19 configuration as core cut number 1 and the same
20 condition; it's wet.

21 Q. So the construction of the roof of
22 building 3 is the same, from what you could
23 tell, of construction as building number 2?

24 A. Yes.

25 Q. Building 1 is a little bit different.

1 Building 2 and three are the same?

2 A. Yes. And based on our review of the real
3 estate records, the buildings were not
4 constructed all in the same year. So it looks
5 like building 1 was done first. And then
6 probably two and three were done at the same
7 time. So a different construction technique
8 was used.

9 Q. Did you notice any patching of the EPDM
10 roof on building 2?

11 A. Yes. And back to your question. There's
12 evidence of patching on every -- on all three
13 roofs when I visited. There's evidence of
14 some, what I would call, reasonable facilities
15 maintenance --

16 Q. And were there --

17 A. -- as being done.

18 Q. Okay. And were there evidence of bubbles
19 on all three roofs?

20 A. Yes.

21 Q. Did you perform any calculations in
22 connection with any of the opinions that are
23 cited in the report jointly -- well, that you
24 wrote portions of, that Mr. Johnson wrote
25 portions of and you and Mr. Johnson jointly

1 wrote portions of?

2 A. Section 3.9, as I indicated before,
3 Johnson does a quick calculation on the uplift
4 conditions for the roof.

5 Q. 3.9 was prepared by Mr. Johnson?

6 A. Yes. This is in answer to the -- so in
7 the method of repair, do we take the
8 lightweight -- the lightweight concrete is
9 physically damaged and needs to come out. All
10 right. Is that lightweight concrete part of
11 the roof assembly for its weight as well as
12 some insulating quality, or is it simply there
13 for insulating quality? So whenever a new roof
14 assembly goes back on, typically they would put
15 in rigid insulation much thicker than is there
16 now for the energy code and then a new membrane
17 over the top. If the weight of that material
18 is lighter than what's there now, the roof
19 could be subject to structural uplift in a wind
20 event; not just the membrane but the entire
21 metal roof underneath. So that's what he's
22 talking about.

23 Q. Section 3.9 goes to a method of repair, to
24 what would be an appropriate mechanism for
25 repair?

1 A. Well, not -- it's something to look for.
2 It's something that has to be -- this has to be
3 calculated out and designed depending on what
4 the final roof assembly is determined by the
5 contractor.

6 Q. Okay. So section 3.9 has nothing to do
7 with the cause of the damages --

8 A. No.

9 Q. -- is that correct?

10 A. That is correct.

11 Q. Are there any calculations anywhere within
12 the report that have anything to do with
13 determining the cause of the damages to the
14 roof?

15 A. No. There's no calculations that have
16 been done.

17 (Exhibit Number 35 marked for
18 identification.)

19 BY MR. TAYLOR:

20 Q. Let me show you what has been marked as
21 Defendant's Exhibit 35 for identification. And
22 this is a series of photographs. Let me count
23 them so we can make the record clear.

24 MR. CONCHIN: What number, Wayne?

25 MR. TAYLOR: Hang on. I came up

1 with 21 photographs that comprise what I have
2 marked as Exhibit 35 for identification.

3 THE WITNESS: I thought you said you
4 didn't have our photos. Looks like you do.

5 BY MR. TAYLOR:

6 Q. Okay. I said I think I did have them. I
7 just didn't know they went with your report.

8 A. You have some of them. These are not all
9 of them.

10 MR. TAYLOR: So, Gary, these are
11 photographs that were taken back in July of
12 2015. It's a set of 21 different photographs
13 that I have marked as Exhibit 35 for
14 identification.

15 MR. CONCHIN: I've got them attached
16 to my report. Okay. Okay. I gotcha.

17 MR. TAYLOR: So I apparently did
18 receive the photographs that we were talking
19 about today, I think. We'll have to
20 double-check that. We just didn't --

21 MR. CONCHIN: We resent them again a
22 while ago.

23 MR. TAYLOR: Okay. We just didn't
24 know it was part of the report. That's all.
25 We just thought they were photographs.

1 MR. CONCHIN: Okay. We resent them
2 in bulk a while ago from that Dropbox. But we
3 resent them.

4 BY MR. TAYLOR:

5 Q. Okay. If you look at the first
6 photograph --

7 A. (Views document.) Yes.

8 Q. -- of Exhibit 35 for identification, I'm
9 looking at some screws that appear to be coming
10 through a metal roof.

11 A. Yes.

12 Q. What are these screws that are depicted?
13 What are they for?

14 A. I'm assuming this is roof number -- and in
15 our Word documents that I talked about when we
16 put a photo report together, I would be able to
17 tell you where these are from. But I'm
18 assuming this is roof number 2 or number 3.
19 And these would be screw fasteners that are
20 used to hold that insulation in place.

21 Remember I said there is two inches of a rigid
22 insulation. So typically there is a nail that
23 has -- or a screw that has a cap on it called a
24 cap nail or cap screw. It's about three inches
25 around. And that is used as a compression cap

1 to hold that insulation in place.

2 Q. If we kind of look along where those
3 screws are, are we seeing any corrosion that's
4 depicted in that photograph?

5 A. What we're seeing here is often
6 misidentified. The lightweight concrete when
7 it is installed is liquid form. So it
8 basically is poured out onto the roof to form
9 its two or three inches in thickness. What it
10 does then, like any liquid, is it goes to the
11 seams. This right here is a seam between the
12 two roofs where the panels come together
13 between the two metal panels. So that material
14 leaks out of there or leeches out of there at
15 those seams. And it's often misidentified as a
16 roof leak. It's not a roof leak. This is from
17 the original insulation of the lightweight
18 concrete.

19 Q. And the lightweight concrete being white?

20 A. Yes.

21 Q. And -- but I'm looking at what appears to
22 be kind of a brownish or orangish color, would
23 that be corrosion?

24 A. Well, it would be rust that is coming
25 through at that seam location. It looks to be

1 fairly new in terms of its appearance. So this
2 would be a location where, as I talked about,
3 water comes in at penetrations. Water comes in
4 at puddle welds, which are where the metal deck
5 is welded to the structural joist -- and we
6 talk about that in our report -- and then it
7 comes in at seams. So this would be a location
8 where if water's got into this assembly and
9 this lightweight concrete is getting saturated
10 and wet, some water is going to come out of
11 that seam.

12 Q. Into the seams and also through where the
13 screw holes are?

14 A. Correct.

15 Q. That's what you meant when you said the
16 penetrations would be --

17 A. Yes.

18 Q. -- you know, the holes made by the screws
19 where --

20 A. Correct.

21 Q. If you turn to the second photograph --

22 A. Yes.

23 Q. -- we're looking also at a seam?

24 A. Yes.

25 Q. Same type of thing with the liquid -- the

1 light concrete?

2 A. Yes.

3 Q. And we see some corrosion there?

4 A. Yes. That's where water has come through;
5 early stages of corrosion.

6 Q. Same thing with regard to the third
7 photograph to the exhibit?

8 A. Yes.

9 Q. Also corrosion it looks like on some kind
10 of a beam or something on the fourth
11 photograph?

12 A. Yes. This looks like more of an active
13 leak location. It's forming almost like
14 stalactites, if you will, below the metal bar
15 joist. So that is in -- that's getting a lot
16 of water contribution right there.

17 Q. By looking at the fourth photograph, can
18 you tell how long this leak has been occurring?

19 A. No. But it looks active, meaning it looks
20 like it's still leaking. It's repetitive.

21 Q. Do you know how long it has been leaking?

22 A. No.

23 Q. And on the fifth photograph, again, the
24 same type of deal, we're seeing corrosion at
25 the seams?

1 A. Corrosion at the seams. But what's more
2 important here is right where the bar joist
3 comes into the roof deck itself, you'll see
4 that the bar joist, as it comes down at an
5 angle, one of the struts is completely coated.
6 That is typically what happens when there is a
7 puddle weld. So when you weld the metal, you
8 leave a hole there. And so that's a location
9 where water -- if the roof is leaking, water is
10 going to go to that source and come through.
11 So this is likely a place where water had
12 leaked before the storm event but is also going
13 back to the same location after the storm
14 event.

15 Q. Indicating an ongoing leak since before
16 the storm?

17 A. Well, not necessarily an ongoing, a place
18 where it leaked. And that may have been one of
19 the reasons they put the membrane on over the
20 top. This may have been a location that was
21 leaking, so they put a membrane on it. This
22 rust location could have been there for ten
23 years, could have been there well before the
24 storm.

25 Q. We don't know whether it was leaking

1 before the storm or whether it started leaking
2 again as a result of the storm?

3 A. Correct, we do not.

4 Q. I've lost count, but I think we're on
5 seven. Nope, the sixth photograph.

6 A. Yes.

7 Q. Appears to be a wood beam and above it
8 some kind of metal beams.

9 A. Yeah. That's a wood support, but then we
10 have steel construction above that. And we
11 have -- right at the top corner we have a leak
12 location and the water appears to be coming
13 down and running along the wood. So this again
14 would be one of those -- it's leaking in the
15 top left-hand corner.

16 Q. And we see some rust or corrosion there,
17 right?

18 A. Some efflorescence.

19 Q. Would that be rust and corrosion?

20 A. Well, it's the early stages of rust and
21 corrosion. This does not look like something
22 that's been leaking for years and years and
23 years. It runs along the wood. We don't see
24 the rest of the wood in the bottom right-hand
25 corner. That could go another three, four

1 feet. And that's where it's going to deposit
2 into the ceiling below. So if you were chasing
3 this leak and you didn't follow the path of the
4 water, you might patch in the wrong location.

5 Q. And what about these metal supports that
6 we're looking at? We're looking at two
7 different shades, it looks like, of orange?

8 A. Yeah, that doesn't look like water from
9 the roof. That looks to me like this is a
10 conditioned or nonconditioned space depending
11 on how well it's insulated. This looks to me
12 like moisture inside the building that's
13 causing that.

14 Q. So not from a leak, just moisture from the
15 environment --

16 A. Yes.

17 Q. -- inside the building?

18 A. Yes.

19 Q. And then the next photograph is a cut of
20 just the EPDM, right?

21 A. Yes. And I don't know which roof this is
22 on without more context.

23 Q. Do you see any glue? He's holding the
24 bottom side so you could see it. Do you see
25 any glue on that piece of the EPDM that's been

1 cut away?

2 A. This could be a little remnant of it up
3 here in the corner. But no, I do not other
4 than that.

5 Q. Would that be an indication that, at least
6 at this portion, it was not fully adhered with
7 glue?

8 A. Yes, that would be an indication. Yeah.

9 Q. I can't tell, but does it look like
10 there's something protruding through the
11 membrane underneath the EPDM?

12 A. On the one you were just looking at?

13 Q. Yeah, same photograph with the cutout of
14 the EPDM showing the membrane underneath.

15 A. Where are you looking?

16 Q. I'm just -- you don't see anything?

17 A. No. That's the fiberboard underlayment
18 material, this black stuff.

19 Q. If you look at the next photograph, which
20 is just -- actually may be the same photograph,
21 the next two pictures might be the same
22 photograph.

23 A. Yes, they appear to be.

24 Q. I see some squares along some of the
25 seams. Are those patches?

1 A. No. That is a method of -- so when you
2 had an intersecting seam like that, some of the
3 manufacturers want you to put backup protection
4 at that three-point location where you have
5 three pieces intersecting.

6 Q. So that would take a square patch and put
7 it over that intersection?

8 A. Yeah, you put some glue down and you just
9 glue that down to give it a little more
10 protection.

11 Q. And I see that in three places in this
12 photograph?

13 A. Yes. I think that's an as-built
14 condition.

15 Q. You think that's the way it was installed?

16 A. Yes.

17 Q. The photograph which is -- let's get the
18 correct count here -- the tenth photograph --

19 A. Yes.

20 Q. -- it appears that we are looking at a
21 seam here?

22 A. Yes.

23 Q. And if we turn it so that the date is in
24 the bottom right and we go up along that seam
25 toward the top, say, top tenth of the

1 photograph --

2 A. Yes.

3 Q. -- to the left of the seam --

4 A. Yes.

5 Q. -- it appears there is a screw protruding.

6 Do you see that?

7 A. There is a screw on the roof. It's a

8 loose screw.

9 Q. Is it just laying there?

10 A. Yeah, it's just laying there. There were
11 some of those that we saw. That's a screw that
12 would have been used to hold the metal in.

13 Some of the metal had blown off, and that's the
14 size of the screws that came there. I'm
15 actually going to -- looking at this picture,
16 I'm going to change my testimony, the one that
17 you had in front of me, now that I see this.

18 Q. The tenth photograph?

19 A. Yeah.

20 Q. Okay.

21 A. So to the right of the seam that has some
22 patching material over it.

23 Q. Are we looking at the --

24 A. This is the patching material
25 (indicating).

1 Q. Where the seam is?

2 A. Yes. To the right of that you see a nice
3 straight line that's about an inch and a half
4 wide?

5 Q. Yes.

6 A. And you see -- every 12 inches you see a
7 little bump?

8 Q. I do.

9 A. So that is -- so when this -- back circa
10 1992, one of the methods for install was to use
11 a mechanical -- mechanically fastened on the
12 underlying section. So you would take the
13 membrane, you would partially adhere it with
14 adhesive, and then on this edge here, you would
15 use this metal termination bar and you would
16 literally screw through the membrane and mount
17 it. And then the next piece would go over the
18 top of it to cover it.

19 Q. Is that a technique that's used today?

20 A. No, it's not. The manufacturers abandoned
21 that technique because of leaking issues and
22 because of uplift issues. It's just not used
23 anymore. But it did meet the specifications
24 back in the day.

25 Q. If you look at the 11th photograph -- did

1 I do this wrong? I did. I apologize. Hold on
2 one second. I got them out of order. Is that
3 the next one with the tarp?

4 A. Well, you had the one with the tarp.

5 Q. What's before that? That's what I
6 thought. I got them out of order. Give me
7 just a half a second.

8 A. Actually, before that is this one.

9 Q. This one with the numbers 3096060 2,
10 that's right before the one with the tarp, is
11 that right?

12 A. Yes.

13 Q. I have them in order now.

14 A. Yes.

15 Q. Do we know which building we're looking
16 at?

17 A. With the tarp?

18 Q. Yes.

19 A. This is the building 1.

20 Q. This is the tarp that you were talking
21 about, the ten-by-ten?

22 A. Yes this is the one I showed in the
23 picture. This is the same location as the
24 picture.

25 Q. Because this looks blue to me, not white.

1 A. Well, it's a black-and-white photo on the
2 Google Earth that we have in the thing, so it
3 might look gray. But, in fact, in the Google
4 Earth, if you look, there is kind of a
5 rectangle in the middle of that photo, which
6 would be the exemplary of that piece of metal
7 that's sitting there. So I believe that that
8 was in place when that Google Earth was taken.

9 Q. But in this photograph, it shows that it's
10 clearly a blue tarp?

11 A. Yes, it does. Okay.

12 (Exhibit Number 36 marked for
13 identification.)

14 BY MR. TAYLOR:

15 Q. Let me show you what's been marked as
16 Exhibit 36 for identification.

17 A. (Views document.)

18 Q. This, I believe, is the report prepared in
19 connection with the scope of the fire damages,
20 is that right?

21 A. Just a second. I'm getting all of these
22 in order for our court reporter so she doesn't
23 get mad at me. Yes, that is correct.

24 Q. Who authored this report?

25 A. I did.

1 Q. In its entirety?

2 A. Yes.

3 Q. And this is based upon laboratory results
4 from sampling performed by Jim Irmiter and Adam
5 Peiro?

6 A. Yes.

7 Q. Okay. Did you take any of the samples
8 yourself?

9 A. No. We don't -- I certainly could have.
10 I have many times. For chain of custody
11 reasons, the person who takes the sample
12 doesn't read the samples. So Jim and Adam are
13 both highly trained in taking these types of
14 samples, have done it many, many times and
15 continue to do it today.

16 Q. And what did Jim Irmiter and Mr. Peiro --
17 and I would call him Mr. Irmiter, but we need
18 to differentiate on the record between you and
19 your son. How did Jim Irmiter and Mr. Peiro
20 take the samples that were taken?

21 A. Samples were taken -- well, first of all,
22 the locations of the samples were taken based
23 on my discussions with them having visited the
24 site. I told you I stepped into the cause and
25 origin location. I looked at the design of the

1 building. I looked at the pattern of smoke and
2 soot damage on the exterior of the building.
3 And from there, based on how the building is
4 constructed and the design of the building,
5 made a determination of, number 1, was it
6 possible for particulate matter from the fire
7 to go beyond the room itself. Number 2, if it
8 was possible, what would be the mechanism for
9 that to occur in terms of air movement within
10 the building. And then from there, have them
11 go ahead and do their sampling. So those were
12 the recommendations. And then we had them
13 sample specifically in a few areas where we
14 figured they would have little or no
15 contribution from smoke as a result of the
16 distance away from the fire or the type of
17 construction. They used Air-O-Cell cassettes.
18 They used -- I can't remember in this case if
19 we used tape lifts or not. We might not have.
20 Q. Would you double-check that? Because I
21 believe the answer is they did not, but I want
22 the record to be clear on that.

23 A. They did not do tape lifts, but they did
24 some bulk sampling, and then they did some swab
25 sampling.

1 Q. All with Air-O-Cell?

2 A. No. The bulk sampling would be a piece of
3 material that would be looked at. And the swab
4 is not unlike taking a DNA test. It's exactly
5 the same product. You open up the swab, you go
6 in and swab it and you put it back in the
7 container and have it tested.

8 Q. When you say a swab, is that an alcohol
9 swab?

10 A. This particular one does not have alcohol
11 on it that we use.

12 Q. And then what would happen is that Jim
13 Irmiter and Mr. Peiro would go onto the scene
14 and they would take their samples?

15 A. Yes.

16 Q. And send them off to a laboratory?

17 A. Yes.

18 Q. And in this case, which lab was it sent
19 to?

20 A. We sent it to NG Carlson labs.

21 Q. Where is NG Carlson labs located?

22 A. I believe it's New Brighton, Minnesota.

23 Q. Are there various levels of testing that
24 could be performed by a laboratory that samples
25 are sent to?

1 A. Yes, absolutely. There is -- different
2 labs call it different things, but the industry
3 has pretty much settled on qualification of a
4 level one through four. And we do all of those
5 types of samples.

6 Q. And what is level one?

7 A. Level one is presumptive. It's a
8 broad-spectrum sampling utilized cost
9 effectively to determine if, in fact,
10 particulate matter from combustion byproducts
11 have spread throughout a building. It's kind
12 of the first step in this type of sampling
13 methodology. It relies heavily on the practice
14 of microscopy and the person reading the
15 sample. So, for example, there's four of us in
16 the room right now. The four of us, depending
17 on our education, training and experience,
18 under level one sampling would look under that
19 microscope, and you may say it's soot. Court
20 reporter may say: No, I think this is a paint
21 residue, and somebody else may look at it and
22 say: Oh, I think it's just rust that's turned
23 black. So it's presumptive in nature. We rely
24 on the industrial hygienist, in this case, Neil
25 Carlson, who teaches microscopy at the

1 University of Minnesota and has for, I believe,
2 25 years, to do this analysis for us on the
3 level one. I will tell you as part of the
4 process that we've utilized with level one,
5 Mr. Carlson -- and I helped him on some of this
6 during our pilot program -- burned, I believe,
7 2000 different types of wood and/or products to
8 develop the slides to do comparisons just like
9 you would with mold. So, for example, when he
10 looks at a slide and says: This is
11 Stachybotrys, it's well documented in the
12 literature this is what Stachybotrys looks like
13 every time. So he compares the morphology of
14 what he's seeing and renders an opinion about
15 what he thinks he's seeing. And then based on
16 that opinion, we develop a scope of repair.

17 Q. I know I asked you a lot of questions
18 about your education, but I don't think I asked
19 you this specific question: Do you have a
20 degree in any science field?

21 A. You did ask me that, and I said no.

22 Q. Do you meet the requirements of the
23 American Board of Industrial Hygienists to be
24 considered an industrial hygienist?

25 A. No, absolutely not. I have been qualified

1 in federal and district courts to testify on
2 both mold, the effects of mold and on soot and
3 the effects of soot as a carcinogen.

4 Q. Does Jim Irmiter meet the requirements of
5 the American Board of Industrial Hygienists to
6 be considered an industrial hygienist?

7 A. No.

8 Q. Does Adam Peiro meet the requirements of
9 the American Board of Industrial Hygienists to
10 be considered an industrial hygienist?

11 A. No. But Mr. Carlson does, and he's the
12 one that read the samples.

13 Q. What are Mr. Peiro's qualifications in
14 mold and soot-sampling techniques?

15 A. He has a degree in environmental science
16 from the University of Colorado. Part of his
17 training was in sampling techniques for
18 particulate matter, including mold. They did
19 lab studies. I mean, they learned how to do
20 this in school. He then -- when he joined us,
21 he then learned additionally how to sample.
22 The methodology he learned from us, which is
23 different than what he learned in school, which
24 they don't teach you in the school of
25 industrial hygiene, is the science behind air

1 movement in buildings.

2 Q. Do you know what class it was or what
3 laboratory Mr. Peiro actually took during his
4 studies of industrial -- environmental science?

5 A. I don't know the name of it. I know my
6 son took the same classes.

7 Q. Your son has an environmental science
8 degree as well?

9 A. From the same university, yes.

10 Q. Can you see individual mold spores without
11 a microscope?

12 A. You can visually identify mold on a wall,
13 absolutely.

14 Q. Can you --

15 A. You can see the hyphae. If you look
16 closely, you can see the hyphae, you can see
17 the growth. The -- but there's also times when
18 you can't see the mold. And I'll give you an
19 example of that. I was an expert on the
20 largest pharmaceutical disaster case in U.S.
21 history in Framingham, Massachusetts. It was
22 the functional meningitis case seven years ago.
23 I worked with the CDC and the federal
24 government. And I was the guy that actually
25 found the Exophiala at the site when the CDC

1 couldn't find it because I chose to sample
2 based on air movement within the building and
3 what could happen; not what they could visually
4 see. So again, yes, you can visually identify
5 mold, but there's other things that need to be
6 done to go a step further than that.

7 Q. Let's go back to the various testing,
8 levels of testing.

9 A. Yes.

10 Q. And I think you testified about level one,
11 and it was presumptive?

12 A. Yes.

13 Q. And it relies heavily on microcopy [ph.]?

14 A. Microscopy.

15 Q. Microscopy.

16 A. Tough word.

17 Q. Excuse me.

18 A. Yes.

19 Q. Forgot the S. What is level two?

20 A. Level two and level three are presumptive
21 in nature as well. I will tell you -- I will
22 go on record as telling you that in reviewing
23 the report that was put together by EMSL on
24 behalf of Chubb, I believe that that testing
25 was level three. It was not level four. It

1 does not follow the criteria of the level four
2 reports that we have gotten from EMSL in the
3 past or from other labs. So I think that what
4 has been done by both parties is presumptive at
5 this point in time. But essentially you're
6 just using different levels of microscope to
7 look at the particles level -- in level two and
8 level three. And you are sorting for different
9 particulate matter. We don't typically do
10 level two or level three. We do level one, and
11 then we jump to level four.

12 Q. In this case, what did you use?

13 A. We just used level one. We made
14 recommendations to -- if they wanted to to go
15 to level four with Mr. Howarth, and he said
16 there was no reason that he saw to do that.

17 Q. And what is level four?

18 A. Level four is a -- it uses a much higher
19 level of two different microscopes. Primarily
20 what we're focusing on is what is called TEM.
21 What we would expect to see in a level four
22 analysis is we would expect to see a chart that
23 lists the number of -- the percentage of
24 overall background material, how that's broken
25 out, in generic terms, skin flakes, we might

1 see different types of dust. But then there is
2 a next level where it's actually broken down
3 into the compounds. We would see a chart that
4 would say: In this particular sample at the
5 cause and origin location, we see nine
6 different compounds. We see carbon being the
7 largest, because it's a fire. But boy, we also
8 see chlorine, a spike in chlorine. We see
9 spike in magnesium. We see a spike in other
10 types of heavy metals. That's going to give us
11 a great indication of if we do the same thing
12 then in other locations and we're finding those
13 same markers, we can then relate those to the
14 actual cause and origin location of the fire.
15 And then there are photographs of those that
16 are taken. And the photographs by the lab are
17 also produced in that report so you can
18 actually then look at the photographs.

19 For example, in a complex fire, soot
20 will -- like this, soot would actually form
21 into a grape-like pattern. So when you are
22 looking at the lab photographs under high
23 resolution microscope in level four, you'll be
24 able to see those patterns. And the lab will
25 be able to tell you that: Yes, based on the

1 compounds that are here, the type of fire, the
2 cause and origin location results, we are
3 finding this percentage of soot or this
4 percentage.

5 The problem also with level four sampling
6 and any of this sampling, and it's stated very
7 clearly in the EMSL documentation, is that the
8 longer you wait from the time of the fire to
9 take your samples, the more your results will
10 be weakened. What that means is regular
11 background dust continues to happen every
12 single day. So if I have soot that has settled
13 on a surface, and I test it the day after the
14 fire, and I come up with 20 percent soot in
15 that sample out of all the compounds that are
16 in there, 20 percent of it is soot. The rest
17 of it is other types of background dust
18 equaling another 80 percent. I may test that
19 same location -- and we've done this many
20 times. I may test that same location two years
21 later because no work has been done, and I'll
22 find out that the soot in exactly the same
23 location has dropped down to three percent and
24 the background dust is now 97 percent. The
25 soot didn't go anywhere. It's still there.

1 It's still a problem that has to be dealt with,
2 it's just masked by the other particles.

3 Q. When was the last time you went on the
4 EMSL labs website?

5 A. I had a deposition two weeks ago in
6 Oakland, California. I was on the site
7 preparing for that deposition two weeks ago, so
8 that was the last time I was on it.

9 Q. And so you say at the EMSL labs, level one
10 is presumptive?

11 A. Yes.

12 Q. Level two is presumptive?

13 A. Yes.

14 Q. Level three is presumptive?

15 A. Yes.

16 Q. And level four is what?

17 A. Well, they call it defensible.

18 Q. Defensible or confirmatory?

19 A. Well, they use the term, and I've read it.
20 They may have taken this off their website, but
21 I certainly have seen it many times before.

22 Level four is defensible in the courts, quote,
23 unquote. And let me tell you something about
24 that. Here's the problem: All of it is
25 presumptive, every single piece of it, because

1 that person looking under the microscope is
2 still presuming what they're going to see.

3 Q. Well, let me ask you a question. Between
4 level -- where would you expect to see a
5 more -- the most accurate result, would it be
6 level four, or is it no more accurate than
7 level one in your opinion?

8 A. Depends on the microscopy that is being
9 done to it. I will tell you that when we have
10 done level four on top of level one at the same
11 exact location -- we just did this two weeks
12 ago -- we will do concurrent sampling while
13 we're there. We will take level one samples.
14 And when we're in the area, we will gather
15 samples to keep them in chain of custody and
16 storage to do level four. We didn't do that in
17 this case. Every time we have turned those in,
18 85 percent of what Mr. Carlson finds as high
19 levels of char or soot come back positive with
20 the similar levels from either EMSL or
21 MicroVision, the two labs that we use.

22 Q. Does -- the term "presumptive" as used by
23 EMSL, for example, does that mean it may be
24 there?

25 A. Absolutely, it may be. But if you also

1 read the -- look at the EMSL report on this.
2 So they have their chart. Look at the bottom
3 in the small letters. It says, "presumes to
4 be." Presumes to be -- it's all presumptive.
5 Everything on there -- everything that they
6 have produced for this case is presumptive as
7 well.

8 Q. Okay. Well, that's what I want to get an
9 understanding of. What's more reliable in your
10 opinion, level four or level one?

11 A. Level four.

12 Q. What's more reliable, level three or level
13 one?

14 A. About the same based on the sampling that
15 we've done.

16 Q. So you think that level three is no better
17 as far as results despite the different levels
18 of miscrop -- microscop -- you know what I'm
19 saying.

20 A. Microscope reading.

21 Q. Microscope reading. You don't think that
22 level three is any better than level one?

23 A. No. We haven't seen it in the -- when
24 we've done the sampling, we've sent in all
25 four. We've done concurrent -- we've done

1 concurrent sampling where we've asked for
2 samples on all four levels from exactly the
3 same locations, and we just do not see the
4 benefit in this type of work to level two or
5 level three. And level four, we have some
6 severe issues with MicroVision in -- I'm sorry,
7 with EMSL in comparison to some other labs that
8 we use and the methodology that they use for
9 sampling level four.

10 Q. Isn't the difference between level two and
11 three, it's just less particulates or less
12 particles? In other words, the microscope
13 being used is stronger?

14 A. Is it? Or is it just the field is
15 smaller? You see, that's the nuance.

16 Q. Well, I'm asking you.

17 A. Well, okay, so if I give you a sample --
18 if I take a sample like this and I take a tape
19 lift off of this or I take a bulk sample off of
20 this and now you're going to look at that
21 underneath a microscope. Okay? So all of this
22 revolves around counting. All this is done by
23 the person counting and extrapolating. So I
24 see these many particles in this field, and so
25 I am going to look at the overall and I'm going

1 to say: This is what I think the percentage of
2 this is. It's spit-balling essentially, the
3 whole thing. So by using a larger microscope
4 and looking at a smaller field are you, in
5 fact, getting an accurate read of what's going
6 on in the building? I don't think so.

7 Q. You're aware that Mr. Sumner testified
8 that he had EMSL perform level four testing?

9 A. Then where is the level four results?
10 Because they are not in the EMSL report.

11 Q. You understand that that's his testimony?

12 A. I understand that's his testimony. The
13 report that I have seen is not a level four
14 report.

15 Q. What did you do or Jim Irmiter or Adam
16 Peiro do in order to determine background
17 levels of soot that were unrelated to the
18 March 2014 fire loss?

19 A. In level one -- we can't do that in level
20 one.

21 Q. So then the answer is nothing?

22 A. Nothing, yeah.

23 Q. I had asked you before have you heard of
24 the American Industrial Hygiene Association,
25 and I think your answer was yes earlier today,

1 is that right?

2 A. Yes. They actually asked me to deliver a
3 presentation on the New England Compounding
4 Center findings. Now that that case is settled
5 and everybody is in prison, I can now finally
6 start sharing the background information on
7 that case.

8 Q. Are you aware that the American Industrial
9 Hygiene Association has an accreditation
10 program for laboratories?

11 A. Absolutely. I understand Mr. Carlson's
12 lab is not accredited. This was simply level
13 one broad spectrum sampling. I trust
14 Mr. Carlson's -- you can certainly bring him in
15 and depose him and check his credentials. They
16 are pretty outstanding.

17 Q. I was going to ask you that question
18 because I went on the Carlson website last
19 night, and I could not see any indication that
20 his laboratory was accredited by the American
21 Industrial Hygiene Association?

22 A. Oh, it's not. I know that.

23 Q. Is EMSL accredited by the American
24 Industrial Hygiene Association?

25 A. Yes, they are. And tell me why it is that

1 when I get a concurrent sample from a project
2 and I send one to EMSL, who is used almost a
3 hundred percent by the insurance industry, and
4 I send one to another lab and the level four
5 results come back completely differently,
6 EMSL's will say less than one percent, and my
7 other lab's telling me ten to 15 percent in
8 exactly the same location? That to me is
9 pretty scary.

10 Q. Does Mr. Carlson's laboratory hold any
11 accreditation that would be something other
12 than from the American Industrial Hygiene
13 Association?

14 A. No.

15 Q. By the way, I think you had testified
16 earlier today that your fee for this report was
17 \$3,500 plus the cost of the lab. If we look to
18 page 2 of your report that we have marked as
19 Exhibit 36 for identification, it indicates
20 that your fee was \$7,500.

21 A. Right. That must be the lab fee included
22 then, yep.

23 Q. You indicated in preparing your report
24 that you reviewed ASTM D6602-13?

25 A. Yes, very familiar with it.

1 Q. Do you know if the Carlson laboratory
2 utilized the methods of analysis discussed in
3 that standard?

4 A. Yes, they do.

5 Q. He does?

6 A. Yes.

7 Q. And how do you know that?

8 A. Well, I know him personally. I've been to
9 his lab. We've done 450 to 500 soot samplings
10 over the last seven years together. I know he
11 does. But you can ask him yourself.

12 Q. Is Mr. Carlson's lab capable of performing
13 what would be called -- what you call
14 defensible or confirmatory analysis for the
15 presence of soot?

16 A. I didn't call it defensible. I want to go
17 on record as saying that. That is something --

18 Q. What do you call it?

19 A. I call it a level four test for a chemical
20 analysis.

21 Q. Is Mr. Carlson's laboratory capable of
22 doing a level four test?

23 A. I don't know. I don't think so.

24 Q. Can you do a level four test from
25 Air-O-Cell cassettes?

1 A. There is debate about that. You can do a
2 level four from tape lift. And the Air-O-Cell
3 cassette is essentially a tape lift mechanism.
4 And we've been working with a couple of labs to
5 move in that direction. We are able to do
6 level four now off of tape lift very
7 successfully. So we think that we're getting
8 close to that. But right now I'm not aware of
9 it.

10 Q. Not aware that --

11 A. Yeah.

12 Q. -- you can do a level four test from an
13 Air-O-Cell cassette?

14 A. Correct. One of the values of doing a
15 level four off a tape lift is there is no
16 alcohol involved, so it doesn't wash down the
17 sample.

18 Q. What is the importance of accreditation
19 standards for laboratories?

20 A. Well, they're certainly hard to get.
21 That's an ISO standard. It essentially goes
22 through each one of your processes and
23 procedures, looks at your -- my construction
24 company looked to go through this years ago, so
25 I am familiar with it. And they go through

1 your processes, your procedures. They go
2 through just statistical tracking of those
3 procedures. And you basically have to maintain
4 a certain level of competence.

5 Q. Are you aware of any standards or
6 regulations that determine unsafe levels of
7 soot in a building?

8 A. No. And isn't that the problem? So no
9 soot is acceptable.

10 Q. There's no standard?

11 A. No. No soot is acceptable because there
12 is no standard. We sampled specifically for
13 five micron or less in size of soot and found
14 that in 96 percent of the samples. That is a
15 size of particulate that will go through your
16 lungs and embed in your lungs. That's an
17 issue.

18 Q. Do you yourself have any specialized
19 science training or credentials in sampling or
20 analysis of mold or soot?

21 A. Well, certainly the CDC thought I was
22 competent enough to do the largest
23 pharmaceutical disaster mold case in U.S.
24 history based on a building science approach to
25 the examination as opposed to a visual analysis

1 of where I might see mold. And I was the
2 person who found the mold that linked to the
3 deaths of the 72 people that died. So, yeah, I
4 think I do have some training in that. I've
5 been collecting samples now for 24 years,
6 worked with some of the best-known hygienists
7 in the country doing concurrent sampling.

8 Q. So based --

9 A. No one has ever questioned the methodology
10 of the samples that I have taken. They have
11 been challenged one time in a Daubert
12 challenge, and that was successful. So --

13 Q. That was what?

14 A. That was over -- the Court agreed that my
15 testing was fine, my sampling was fine. Again,
16 I'm not reading the samples. I can't tell you
17 when I grab that sample what it is. I'm not
18 going to do that. I'm leaving that up to an
19 industrial hygienist.

20 Q. So essentially your training and
21 credentials are your 24 years of taking
22 samples, is that it?

23 A. Well, yes. Yes. Well, no. On my CV,
24 there's seminars -- I've been to -- I've been
25 to mold training seminars. I've -- yeah, I've

1 had -- I didn't just learn it in a vacuum.

2 Okay? I have had specific training at mold
3 training seminars.

4 Q. If you turn to page 5 of your fire report,
5 what we've marked as Exhibit 36 for
6 identification, there is mention of air
7 sampling with Air-O-Cell cassettes and a
8 calibrated sampling pump?

9 A. Yes.

10 Q. What type of pump was used?

11 A. Anderson pump.

12 Q. Any particular model?

13 A. I can't remember. I would have to look at
14 the -- what our guys used that day.

15 Q. When was the pump calibrated last before
16 it was used?

17 A. We calibrate our pump once a year. I
18 could -- we have the data on it. I could
19 check. But it gets recalibrated once a year.

20 Q. What type of calibration method is used?

21 A. Well, the pump itself gives you an adapter
22 that you put on the top and you run it for
23 three minutes, and you calibrate based on that.

24 I can't tell you what they do at the
25 manufacturer when we send them in. We own -- I

1 think we own six of these pumps, so we recycle
2 them and send them in again and recalibrate it.

3 Q. On page 16 you give a definition of the
4 term "soot."

5 A. Page what?

6 Q. 16.

7 A. Yes.

8 Q. Where did this definition come from?

9 A. This came from the International Agency
10 for Researching Cancer, IARC.

11 Q. Is this definition the same as what is
12 provided in ASTM method D6602-13?

13 A. Don't know. I would have to look at the
14 standard again.

15 Q. So if I understand correctly, Jim Irmiter
16 and Adam Peiro took all the samples, they were
17 sent off to the lab?

18 A. Yes.

19 Q. And you got the lab results. And based on
20 that, you authored the report?

21 A. Yes.

22 Q. The visual evidence at the source of the
23 fire at the Knights Inn, does it suggest that
24 the fire was oxygen rich or a slow, smoldering
25 fire?

1 A. Oxygen rich. No question about it. It
2 went pretty quick. That's why I think we've
3 got the amounts of char that we have. It's
4 more consistent with a forest-fire-type thing.
5 The -- yeah, that's an oxygen-rich mixture.

6 Q. Are you familiar with the mold sampling
7 procedures provided by the American Industrial
8 Hygiene Association?

9 A. Absolutely I am.

10 Q. What is the publication? What did that
11 set out?

12 A. See if I've got it cited in here. I'm
13 also familiar with the ASTM standards for tape
14 lifts and other things. Just a second. I
15 believe it is published in document number 12
16 on page 3. It's also cross-referenced in
17 document number 18. It's also cross-referenced
18 in document 19.

19 Q. Those --

20 A. It's also on the NIOSH website. Do I --
21 as a building code official, I've been trained
22 that I don't have to memorize the code. I just
23 need to know where to find the information. So
24 I know that the information is in those
25 documents. I don't have it memorized.

1 Q. What type of testing is necessary in order
2 to determine the species of mold that is
3 present?

4 A. Well, typically we would culture it. The
5 lab would culture it over a seven- to 14-day
6 period depending on what we're looking at. So
7 in this case, again, this is a broad-spectrum
8 sample. I know that -- and you don't have this
9 document here, but the lab results that came
10 back from Carlson, it is a separate report.

11 What I have done is just pasted and cut the
12 analytical. But he does have pictures of these
13 slides. So he shows a picture, for example, of
14 slide number 1, and he shows the char, and he
15 shows the mold, and he has arrows. And all of
16 that stuff is in his report.

17 Q. Are you a licensed mold consultant in any
18 state?

19 A. No. And we were not doing a mold
20 inspection. This was a soot inspection.
21 Mr. Carlson, because of the high levels of
22 mold, included that in his analysis.

23 Q. What is an indoor environmental
24 professional?

25 A. What's an indoor environmental

1 professional?

2 Q. Let me ask it this way: Do you know what
3 an indoor environmental professional is?

4 A. No. That is not a certificate I am
5 familiar with.

6 Q. Were you able to tell whether the property
7 had a regular cleaning schedule?

8 A. Not by the time we got there.

9 Q. Are you familiar with guidelines provided
10 in the Restoration Industry Association
11 guidelines for fire and smoke damage repair?

12 A. Yes. In fact, we reference that in our
13 report.

14 Q. Particularly with regard to cleaning
15 concrete and concrete masonry unit?

16 A. Yeah. Yes, I am.

17 Q. And as it relates --

18 A. That's surface cleaning. Doesn't talk
19 about the core cleaning at all, so...

20 Q. As it relates -- as to what is in your
21 report, since you only popped your head in the
22 units when you were there in June, right?

23 A. Uh-huh.

24 Q. Is that a yes?

25 A. Yes.

1 Q. Did you go in any of the units when you
2 were walking the property in April of this
3 year?

4 A. Yes. At the -- you can see the photos
5 that I -- I mean, I -- yeah, I popped my head
6 in some of them.

7 Q. That's my question. Did you actually go
8 in and do an inspection?

9 A. Every one of these doors. If you look at
10 this building, every single one of these doors
11 was open; every door in the place.

12 Q. Did you go inside, or did you just stand
13 in the doorway and take a picture?

14 A. Stood in the doorway.

15 Q. Okay. You did not actually walk in?

16 A. No.

17 Q. And in connection with your preparation of
18 your report in connection with the fire claim
19 that we've marked as Exhibit 36 for
20 identification, the only two visits you made to
21 the site were in June of 2015 when you popped
22 your head in and out of some of the units, ten
23 to 12, I think you said, right?

24 A. Oh, yes. Yeah.

25 Q. And popping your head in a few of the

1 units and taking some photographs when you
2 visited in April of this year?

3 A. Correct. But I directed my team to take
4 specific photographs to document the open
5 atmosphere construction of the building, which
6 they did.

7 Q. Turn to the last page of your report,
8 which I believe is page 18. Is that your
9 signature, sir, or at least your e-signature?

10 A. Yes, it is.

11 Q. With a date of August 10, 2015?

12 A. Yes, it is.

13 Q. This was approximately, what, 17 months
14 after the fire loss?

15 A. Yes. And that's one of the reasons we
16 believe Air-O-Cells work better in that
17 situation than, for example, an alcohol wipe
18 that is done on a vertical surface as opposed
19 to a horizontal surface.

20 Q. Do you know whether the Carlson labs can
21 perform confirmatory analysis for the presence
22 of soot?

23 A. No, they cannot.

24 Q. If you look at the first page of your
25 report under paragraph A, the last sentence --

1 A. Okay.

2 Q. -- and it states, "Soot in the open cell
3 CMU block and the unit separation walls will
4 require complete demolition of these walls to
5 remove the soot." That's what it says, right?

6 A. That's what it says, yeah.

7 Q. Can you reference any standard or
8 professional organization that recommends CMU
9 removal without evidence of structural damage?

10 A. How else are you going to get the soot out
11 of there?

12 Q. That wasn't my question, sir. My question
13 is: Can you reference any standard
14 professional organization that recommends CMU
15 removal without evidence of structural damage?

16 MR. CONCHIN: Object to the form,
17 assumes there is such an animal.

18 THE WITNESS: I don't know that
19 there is. What I'm saying is that the demising
20 walls have an air space between them of about
21 an inch and a half to two inches. It's loaded
22 with soot on either side of the cause and
23 origin location in particular. So how the hell
24 are you going to get that out of there?

25 BY MR. TAYLOR:

1 Q. I'm asking is there --

2 A. We also drilled into the CMU, physically
3 drilled into it. In the core, it's hollow CMU.
4 It's loaded with soot based on Mr. Carlson's
5 analysis. How are we going to get that out of
6 there?

7 Q. My question is: Do you know of any
8 reference -- or do you know of any standard, I
9 should say, or any professional organization
10 that actually recommends CMU removal when there
11 is no evidence of structural damage? Do you
12 know of any?

13 A. No. It's a health and safety issue. I
14 have a code of ethics as a building code
15 official. This is a carcinogenic material.
16 It's a health and safety issue. It needs to be
17 removed. If you can figure out a way to remove
18 it without taking the walls down, God bless ya.

19 Q. The fire damage, we're just talking about
20 building 3, is that right?

21 A. Yes.

22 Q. That was the only building that was
23 affected by the fire?

24 A. Yes.

25 Q. In the paragraph where you said -- the

1 second paragraph of section A on page 1.

2 A. Yes.

3 Q. Do you believe that the HVAC units can be
4 cleaned?

5 A. They don't exist anymore. It's a PTAC
6 unit. There are also bath fans, however. And
7 the problem is that the bath fans -- it's a
8 concrete structure, but they have drop
9 ceilings. And so the drop ceilings create this
10 entire plenum all the way through the entire
11 building. And the demising walls that go
12 between the units not only have a space between
13 them and are hollow, but they don't connect
14 completely to the floor deck, which is a metal
15 deck. So the metal ribbed deck is open at
16 every single one of these. So I literally
17 could take a string or a laser and I could
18 start at one end of the building and I could
19 shine it all the way through the other end of
20 the building. So the building communicates
21 with itself in all four directions. The bath
22 fans are vented up into the ceiling plenum. So
23 as soon as you turn on the bath fans, it just
24 starts sending everything down the hallway
25 ceiling, that drop ceiling. That's the HVAC

1 system I'm talking about. I'm not talking
2 about the PTACs.

3 Q. Can they be cleaned?

4 A. Not according to the electrical SEA
5 report. The SEA report, which I would concur
6 with having reviewed it, they pretty much
7 pegged the extent of damage as to what we put
8 the extent of damage on. And I would be
9 equally as concerned about the wiring as they
10 are.

11 Q. And in fact, the last sentence of your --
12 of section B on the top of page 2, you said,
13 "Soot in open conduit and CMU wall cavities
14 will require removal and replacement of the
15 wiring and CMU."

16 Do you see that?

17 A. Yes.

18 Q. Are you a licensed electrician?

19 A. I used to actually own an electrical
20 company. But no, I'm not licensed anymore as
21 an electrician.

22 Q. When was the last time you had a license
23 as a --

24 A. We worked as an electrical company when I
25 had my construction company. So we had ICB

1 Electric as well. So we pulled all our own
2 wire. So -- but no, I'm not a licensed
3 electrician.

4 Q. Why are you no longer a licensed
5 electrician?

6 A. I'm too busy doing -- having too much fun
7 doing this.

8 Q. You just gave it up?

9 A. Yeah.

10 Q. Did you give it up as a result of any
11 complaints?

12 A. No. I'm sorry. I did not hold the
13 license. I had a -- licensed electricians on
14 staff. I owned the electrical company.

15 Q. Are you a certified fire investigator? Do
16 you have a CFI designation?

17 A. No, I don't. I don't do cause and origin.

18 Q. I'm sorry?

19 A. I don't do cause and origin or arson.

20 Q. When you say you don't do cause and
21 origin, you don't do cause and origin of fires?

22 A. Correct.

23 Q. On page 3 of your report where you were
24 talking about your review of various
25 materials --

1 A. Yes.

2 Q. -- at number 18, the Institute For
3 Inspection, Cleaning and Restoration
4 Certification --

5 A. Yes.

6 Q. -- is that a current standard that you
7 looked at?

8 A. It was current at the time. It was 2015.
9 That's been updated now.

10 Q. So it was current in 2015 when you looked
11 at it?

12 A. Yeah. It's been updated.

13 Q. On the top of page 4 at section 3.3.26.1,
14 Common Atmosphere?

15 A. Yes.

16 Q. In parenthesis -- you have "SAF-END" in
17 parenthesis.

18 Do you see that?

19 A. Yeah. I don't know what that is. Never
20 seen that before.

21 Q. That was going to be my question. What is
22 SAF-END?

23 A. It's at both of these. I have -- that
24 must be an editing -- I've never seen that on
25 our reports before.

1 Q. That's in 3.3.26.1 and 3.3.26.2?

2 A. Yes.

3 Q. And you don't know what that is?

4 A. No.

5 Q. But you authored the report?

6 A. Yes, I did. Let's consider it a typo. It
7 has no probative meaning to this report at all.

8 Q. Did you consider Bessemer's history as a
9 heavy industry, including coke manufacturing,
10 in determining what are acceptable levels of
11 soot?

12 A. Yeah, it's always everything but the fire,
13 isn't it? No, we didn't. I could only do that
14 with level four analysis, so...

15 Q. Which you did not do?

16 A. We did not do, no.

17 MR. TAYLOR: Gary, we need to take
18 just a brief break. We are at the end of this
19 media tape or whatever it is that he uses, so
20 we need to go off the record for a minute.

21 MR. CONCHIN: Are you through?

22 MR. TAYLOR: I am not through, no.
23 But we have to take a break. The videographer
24 says he needs a break. Okay?

25 MR. CONCHIN: We're not going to go

1 much longer than this. You've been going seven
2 hours basically.

3 MR. TAYLOR: Well, I've not gone
4 seven hours on the record, but I'm wrapping up.

5 MR. CONCHIN: I just said --

6 MR. TAYLOR: Gary, I don't want to
7 get into an argument with you --

8 MR. CONCHIN: [Unintelligible].

9 MR. TAYLOR: -- because I'm getting
10 close. What? I'm sorry?

11 MR. CONCHIN: I just -- if you would
12 quit talking over me, I just said not counting
13 the breaks.

14 MR. TAYLOR: Okay.

15 MR. CONCHIN: Oh. Just chill and
16 get through it, if you would. You're asking
17 the same things over and over.

18 MR. TAYLOR: Actually, I'm not, but
19 that's -- you're entitled to your opinion.

20 THE VIDEOGRAPHER: This marks the
21 end of media unit number 4.

22 We are going off the record at
23 4:10 p.m.

24 (Recess.)

25 THE VIDEOGRAPHER: This begins media

1 unit number 5.

2 We are going back on the record at
3 4:17 p.m.

4 BY MR. TAYLOR:

5 Q. In connection with the samples that were
6 taken to be sent to the Carlson laboratories,
7 did your team collect any outdoor samples for
8 particulates?

9 A. We collected a sample at the -- where the
10 cause and origin location is. You know, that
11 whole wall is gone. It's open. You walk right
12 into it. So it's basically a big rectangle.
13 So we collected a sample right there.

14 Q. Would it have been within what would have
15 been the walls or the exterior?

16 A. It's -- so if this is where the glass --
17 where the wall would have been and the glass,
18 right there (indicating).

19 Q. Right at where the wall --

20 A. Yeah, right where the wall would have
21 been. We're literally in the walkway in that
22 area in the open area.

23 Q. And do you consider that an outdoor
24 sample?

25 A. Yes.

1 Q. Did you take any other outdoor samples a
2 little further from the building?

3 A. No.

4 Q. You indicated before that you took some
5 swab samples?

6 A. Yes.

7 Q. What contaminate were you swabbing for?

8 A. Everything was soot that we were swabbing
9 for.

10 Q. Everything was soot?

11 A. Yes. This was not a mold investigation.
12 Carlson, I recall, called me and said: Was
13 there a lot of water used? And I said: Yes,
14 there's indication of a lot of water used, but
15 there's also a lot of water damage from a roof
16 issue as well. And he would -- whenever he
17 sees a spike in something, you know,
18 Stachybotrys, Chaetomium, some Aspergillus,
19 Penicillium --

20 MR. CONCHIN: [Unintelligible].

21 THE WITNESS: -- he will call me and
22 just say: Hey -- oh, you still there?

23 MR. TAYLOR: Yeah, he is. He's
24 there.

25 THE WITNESS: Okay. He will call me

1 and say: Hey, this is looking odd. What's
2 going on here?

3 BY MR. TAYLOR:

4 Q. When the samples were taken by Jim Irmiter
5 and Adam Peiro, did they wear gloves?

6 A. I can't recall.

7 Q. So -- and if they wore gloves, do you know
8 whether they changed the gloves in between
9 samples?

10 A. That would have been our protocol, yeah.

11 Q. So it's your protocol for them to wear
12 gloves and to change gloves --

13 A. Yes.

14 Q. -- between samples?

15 A. Yes.

16 Q. But you don't know whether that was done
17 in this case?

18 A. I would have to look at the photos.

19 Q. Would you be able to tell from the photos
20 that they changed gloves in between samples?

21 A. No, I wouldn't necessarily be able to tell
22 that, so...

23 Q. The only thing the photos would show is
24 that they were wearing gloves?

25 A. Right.

1 Q. If you look at page 6, the Air-O-Cell
2 sample, I guess, number 1, ambient air --

3 A. Yes.

4 Q. -- this says heavy char greater than five
5 microns?

6 A. Yes. This would have been the one that
7 was taken right at the entrance to the room.

8 Q. Would you agree that a particle greater
9 than five microns is not likely to stay
10 airborne?

11 A. You know, it would depend if it's
12 electrically charged or not depending on -- if
13 it's got heavy metals in it from a fire, it
14 will bond to metal pretty quickly. It will
15 bond -- we found it bonding to cooler surfaces.
16 So it would really depend on the makeup of the
17 particle. And again, level four would tell us
18 that.

19 Q. And you didn't do level four?

20 A. We did not, no.

21 Q. So it would need to have heavy metal in
22 the particle in order for it not to stay
23 airborne?

24 A. Yeah. I mean, it's a static
25 electricity-type thing. So it will -- we know

1 that these particles during a fire, and
2 particularly soot particles, will seek a cooler
3 surface to bond to. And we've had plenty of
4 examples where we are finding on vertical or
5 horizontal surfaces where that soot is not
6 aerosolized, it's sitting.

7 Q. And they took this particular sample that
8 we're talking about with a pump, right?

9 A. Yes, they did.

10 Q. Is that almost like a vacuum?

11 A. It's very much like a vacuum, yes. So
12 this would have been a five-minute sample.

13 Q. Do you know when they took the sample --
14 oh, they ran the pump for five minutes?

15 A. Well, 75 liters at 15 would be five, yeah,
16 so that tells you how long it is, the number of
17 liters.

18 Q. Did they disturb the air when they took
19 the sample?

20 A. No. This was an ambient. It was not an
21 aggressive. That's why it says ambient sample.

22 Q. Explain the difference between ambient and
23 aggressive.

24 A. Aggressive would be -- if I go into a
25 room, I will take an ambient sample and then an

1 aggressive sample. Suppose I'm in a bedroom or
2 something and I have curtains, I'll move the
3 curtains around. I'll take the bedding, I'll
4 move it up and down. I might hit a couple of
5 couches. I'm going to try to raise the dust,
6 if you will.

7 Q. All right. So for ambient, you go in and
8 you take the air as it is?

9 A. Yep.

10 Q. And for an aggressive sample, you will try
11 to get whatever it is into the air --

12 A. Well, yeah, what you're really trying to
13 do, quite frankly, is you're trying to
14 duplicate what somebody who lives in a building
15 or a house that is contaminated what they would
16 experience when they use a regular vacuum and
17 not a HEPA vac. They are actually going to
18 move air and distribute particulate in the
19 process of vacuuming. And so you're really
20 trying to recreate that. It was very clear
21 nobody was going to be living in these
22 structures, so we didn't bother doing that.

23 Q. So I understand correctly, other than the
24 one ambient air sample that was taken right at
25 where the wall used to be at the source of the

1 fire, there were no outdoor air samples taken
2 for soot, is that correct?

3 A. For any particulate matter. This would be
4 an outdoor sample. I mean, it is open to the
5 exterior. Anything that's occurring in that
6 parking lot in that area in front is going to
7 be in that sample. So, for example, in that
8 sample we find no *Stachybotrys*, we find no
9 *Chaetomium*, yet we find those in other areas
10 where there is clear water damage that would be
11 problematic in a mold study.

12 Q. Did your samples take into account that
13 people might burn candles in their units? I
14 believe there was one permanent resident who
15 had a charcoal grill in his room; did you
16 consider that as far as taking your soot
17 samples?

18 A. Well, there was no charcoal grill present
19 during our inspection. So I don't -- and I
20 have not seen a picture of the alleged charcoal
21 grill. I've heard it mentioned.

22 Q. You've heard it mentioned before?

23 A. But I've seen no physical evidence that it
24 existed. We've saw no physical evidence that
25 one existed on the site. I'd be anxious to see

1 the picture of that.

2 Q. Did you account for people burning candles
3 in their units?

4 A. The -- that would be a question that you
5 certainly could ask Mr. Carlson. But I will
6 tell you that the morphology of what he was
7 looking at did not look like candle burning.
8 That is typically very spherical. It's going
9 to lay off of carbon black. I have seen plenty
10 of these when he'll come back and he'll say
11 heavy char, soot. And then he'll say carbon
12 black; indicating candles. That doesn't show
13 up here at all.

14 Q. What about cigarettes?

15 A. That does not show up on here at all. And
16 that would not be able to be looked at in
17 presumptive. That would have to be something
18 we would look at.

19 Q. So you can't test for whether some of the
20 soot is a result of cigarette smoke buildup?

21 A. No. You can actually test that. In fact,
22 we have plenty of examples of older buildings
23 like this where we have done level four. We've
24 asked particularly for a nicotine screen. And
25 we have come back with photographic

1 evidence that, yes, there's nicotine. And
2 guess what's embedded all over the nicotine?
3 Soot on top of the nicotine indicating the
4 nicotine was there first.

5 Q. I wasn't very artful with my question, and
6 I apologize. You did not test for whether the
7 soot is the result of cigarette smoke because
8 that would require level four testing, is that
9 right?

10 A. The presence of nicotine would require
11 that, yes.

12 Q. The level testing that was done here would
13 not show the presence of nicotine or the use of
14 cigarettes?

15 A. Yes. But even that is going to have a
16 more spherical look in the morphology than what
17 we saw in the photos that -- you can't see them
18 because you don't have them, but they are here.
19 The photos that Carlson took don't show that
20 morphology. And, in fact, there is no nicotine
21 that is identified in the EMSL report, which is
22 alleged to be a level four, and there should
23 be.

24 Q. Turn to page 17 of your report under
25 Conclusions. On Interior, it says, "All A/C

1 units in the affected rooms should be
2 replaced." Why can't they be cleaned?

3 A. I say "in the affected rooms." I don't
4 say in the whole hotel. Okay? So in the rooms
5 that are affected -- and this is, I believe,
6 supported by SEA in their report. Based on the
7 amount of soot that we are seeing here, the
8 electrical components would have been affected.

9 Q. Which rooms are the affected rooms that
10 you're talking about? We talking about utility
11 units in building 3 or only some of them?

12 A. The only ones that I can give you an
13 opinion on are the ones that we sampled.

14 Q. And how many rooms was that?

15 A. Let's see, one, two, three, four, five,
16 six, seven, eight, nine, ten, 11, 12, 13, 14, I
17 believe, 15, 16, 17, 18, 19 -- I think 20
18 rooms, and then the two expansion joints that
19 we did in the CMU.

20 Q. Out of how many rooms in that building?

21 A. 67, I believe.

22 Q. You indicate that, "Hall bath fan and
23 appliance ducting must be removed and
24 replaced." Is that for the entire building, or
25 just in the affected units?

1 A. Right now it's just in the affected units.
2 Part of this would be how is the remediation
3 being done, because one of the things that it
4 would have to be protected against is
5 cross-contamination. So effectively you would
6 have to create environmental engineering
7 controls, do room-by-room and keep those
8 controls in place on a negative air so you
9 don't cross-contaminate when you do the next
10 room and the next room and the next room.

11 Q. In the 20 affected rooms where you say
12 that the A/C units all need to be replaced,
13 would still need to be replaced if they were
14 not running at the time of the fire?

15 A. Well, yeah, the particulate matter still
16 gets into the housing. Those PTAC units are
17 not airtight. They still move air from the
18 exterior. There's an air exchange that goes on
19 with those even when they're not running.

20 Q. Have you had any discussion with Arthur
21 Grandinetti?

22 A. No, not that I recall. I know him, but I
23 haven't spoken to him -- I don't recall
24 speaking to him on this matter.

25 Q. Have you had any discussions with Sarah

1 Grandinetti about this matter?

2 A. No.

3 Q. Other than your discussion with
4 Mr. Howarth when you were initially retained,
5 have you had any discussions about your
6 opinions with Mr. Howarth?

7 A. No.

8 Q. Do you know whether Mr. Howarth has ever
9 inspected the site himself?

10 A. I do not.

11 Q. Was your initial assignment as it relates
12 to the wind claim to confirm that there was
13 damage from the tornado in April 2014?

14 A. No, our assignment is never to confirm.
15 Our assignment is to represent the building and
16 figure out what story the building has to tell
17 and to look at all the conditions in the
18 building and eliminate those conditions and
19 arrive at a proximate cause, and we did that
20 here. We took into account the age of the
21 building, the age of the material and arrived
22 at our conclusions based on the ground-truth
23 investigation, the weather analysis.

24 MR. TAYLOR: I believe I have come
25 to the end of the questioning I have subject to

1 Mr. Conchin's questions that he apparently has.

2 So, Gary, subject to --

3 MR. CONCHIN: I'm going to be very
4 brief. I need a little help from the court
5 reporter: Dana, is the résumé, Tom's résumé
6 attached to Exhibit 32 or any other exhibit?

7 THE COURT REPORTER: Tom has
8 Exhibit C in front of him.

9 MR. TAYLOR: Tom has all the
10 exhibits in front of him.

11 THE WITNESS: 32.

12 EXAMINATION

13 BY MR. CONCHIN:

14 Q. Is your résumé attached to 32, Tom?

15 A. Yes, it is.

16 Q. Thank you. And that résumé is current
17 with the exception that -- can you provide me
18 with an updated résumé, please, sir, that was
19 done in November of this year and I'll provide
20 it to other counsel?

21 A. Yes. I'll indicate that the difference on
22 that will be, I believe, three trials, one of
23 them a federal court case, probably four, five
24 depositions, maybe more, and I think an
25 additional couple of appraisals.

1 Q. All right. Sir, thank you. And your
2 résumé accurately sets forth your
3 qualifications, your experience, your
4 educational background, but primarily your
5 experience in this -- in the field that you're
6 testifying in, does it not, please, sir?

7 A. Yes, it does.

8 Q. Does it have -- do you have substantial
9 and numerous years experience locating and
10 investigating, finding water intrusions on
11 roofs and other areas of buildings and
12 determining the scope of the damage caused
13 thereby, please, sir?

14 MR. TAYLOR: Object to the form of
15 the question.

16 Go ahead.

17 THE WITNESS: Yes. We -- this
18 actually goes all the way back to the
19 construction company that I started in '84 when
20 I took it over from my father. We were the
21 first design-build firm in the state of
22 Minnesota. And as a design-build firm, we
23 produced for all of our clients a preliminary
24 design and a preliminary budget. And then if
25 they wanted to move forward with the project --

1 and these were both commercial and residential
2 projects -- we would then perform a forensic
3 investigation at the site. We would actually
4 open up walls, we would open up ceiling
5 assemblies, floor assemblies, roof assemblies
6 to look at as-built conditions to avoid change
7 orders. In an industry that had an average
8 cost of 12 percent for change orders, we
9 averaged one and a half percent for 16 years
10 because of that process. I've been undertaking
11 forensic investigations long before I formed
12 this company. And then my testimony as an
13 expert began with that construction company
14 35 years ago. I think my first case I did was
15 with Marvin Windows.

16 BY MR. CONCHIN:

17 Q. So you've been involved in causation
18 analysis for how long, 35-plus years?

19 A. Yes. Yes.

20 Q. Project cost estimating, that's been a --
21 you have considerable experience in that,
22 especially roofing materials, do you not,
23 please, sir?

24 A. Yes. The very first project I worked on
25 as a kid at 13 was a roof. It was a hail

1 claim. So I'm very familiar with how this
2 works, yes.

3 Q. And your résumé sets forth significant
4 work concerning EPDM. And that's what we had
5 here, part of what the -- structure involved in
6 the Knights Inn, correct?

7 A. Yeah, I --

8 MR. TAYLOR: Object to the form of
9 the question.

10 THE WITNESS: Yes. That is one of
11 the roof assemblies here. I will go on record
12 as telling you that I have installed EPDM
13 incorrectly, and I have installed it correctly.
14 I've seen it morph as a product. I've seen the
15 manufacturers make changes. And so I am very
16 familiar with it, yes.

17 BY MR. CONCHIN:

18 Q. Assuming that Mr. Mulder -- I know you
19 read his report. October 7, 2015, he said the
20 roof was not damaged here by wind or storm, but
21 it was poor installation. Do you disagree with
22 that, please?

23 A. I disagree completely with that. It
24 certainly met -- I don't know if he was around
25 in '92 installing EPDM roofs. I was. It

1 certainly met all installation criteria circa
2 1992, 1995, that time frame, for EPDM roofs.

3 Q. Your résumé says that you have conducted
4 inspections in -- I counted them, 40 states and
5 two protectorates, Virgin Islands, Puerto Rico,
6 and you testified that -- over 10,000 claims.
7 Was that fire claims or just claims in general?

8 A. Well, I think we should get rid of the
9 word "claim" because when people call us --

10 Q. Yeah.

11 A. -- we don't work claims. I'm not an
12 adjustor.

13 Q. Yes.

14 A. We are called to do a variety of
15 inspections on buildings all related to
16 building failure analysis. I don't have an
17 idea generally when we are called if it's in
18 litigation or not. And, in fact, 80 percent of
19 our business is non-litigation inspections. So
20 I don't want you to use that word "claim,"
21 because it's a misnomer. I don't really care
22 about the claim. I don't care about the
23 coverages.

24 Q. Have you been hired by industry and by
25 individuals and by attorneys?

1 A. Yes. In fact, what's interesting about
2 the case I testified to earlier last week in
3 Georgia, Church Mutual -- I had just finished
4 being hired by Church Mutual on the Greenville,
5 Texas Baptist Church. It was all over the news
6 where the steeple had blown off in a tornado
7 and gone through. Church Mutual hired me to go
8 in and inspect that entire project, write up
9 the protocols for the remediation and ended up,
10 as a result of that, paying policy limits on
11 that case.

12 Q. Let me ask you one question -- one or two
13 questions about Sumner's report. You were able
14 to review that, were you not, please, sir?

15 A. Yes, and his deposition.

16 Q. And you felt that regardless of what --
17 the way the marking was and -- that's a level
18 three report, not a level four report, fair
19 enough?

20 MR. TAYLOR: Object to the form of
21 the question.

22 THE WITNESS: It's missing probative
23 important information that we would expect to
24 see in a level four report.

25 BY MR. CONCHIN:

1 Q. All right. Can you imagine why or how an
2 industrial hygienist like Sumner with mold and
3 contamination experience like he had would do
4 an inspection of this premises not be allowed
5 to do a scope of work for remediation or repair
6 for the mold and water issues?

7 A. No. Quite frankly, I can't. I was
8 concerned when I read his deposition also
9 because he -- maybe he didn't recognize that
10 sample number 1 for us, which was considered in
11 my mind to be an ambient of the exterior, had
12 one, two, three, four, five, six fungals that
13 showed up, the highest being Cladosporium with
14 37 colony-forming units. We would use that as
15 a baseline to compare typically for all of the
16 others. So when I go to sample two and I have
17 one, two, three, four, five, six, seven, but I
18 also have two that are not on there, and the
19 Aspergillus, Penicillium is 54 colony-forming
20 units, standard protocols would be that I
21 should not have Aspergillus, Penicillium inside
22 of a unit any higher than I have in my
23 exterior. And here it's higher in every other
24 one, which tells me that there's a fairly
25 significant water intrusion issue. And that's

1 why the hygienist, Neil Carlson, called me,
2 because that's what he was seeing as well. In
3 fact, he said: Tell me this place is not
4 occupied. Because if it were occupied -- and
5 his job at the University of Minnesota and all
6 other campuses statewide is to investigate
7 particularly water damage claims. And he has
8 the authority to shut down buildings, and he's
9 done that. And he said: If this were a dorm,
10 I would have shut it down.

11 Q. Let me ask you about smoke for a moment.
12 Let's stay on that. Is there a reason -- and
13 I'm going to hold up this picture here. Maybe
14 this picture says -- if I can get you back.
15 I've got a --

16 A. I gotcha.

17 Q. -- frozen -- can you see me now?

18 A. Yep.

19 Q. My picture is frozen. So let me get you
20 unfrozen. Can you see this --

21 A. Yep.

22 Q. -- this picture?

23 A. Yeah. That's an expansion joint.

24 Q. All right. Tell me why, this particular
25 structure, why -- what your opinion is as to

1 what the importance of that expansion joint as
2 it relates to your findings related to smoke.

3 A. Well, there are smoke puffs around that
4 expansion joint at the top and at the bottom
5 and on the sides indicating that that would be
6 consistent with a -- in this case, a positive
7 pressure that occurred during -- either during
8 the fire itself or putting out the fire. I
9 read the fire report from the fire department.
10 And a lot of times they will list the equipment
11 that they use for fighting the fire. In this
12 case, they did not. But standard protocols are
13 to use what's called positive pressure to
14 create a path for the fireman to get in safely
15 to put the fire out. This would be an
16 indication to me that positive pressure was
17 applied at the cause and origin location, which
18 would have then pushed that soot with large
19 fans back into the building and through any
20 open bypasses in that building causing those
21 particulates to move well beyond what they
22 would have done without that positive pressure.
23 It's one of the problems with firefighting
24 techniques that has changed the dynamics of
25 soot investigation. I would have pulled that

1 open and -- I would have pulled that open and
2 looked inside there. And, in fact, we did.

3 Q. And did you find soot or smoke damage
4 inside these cavities between, for example,
5 each room?

6 A. Yes. We took pictures. And you can see
7 it's black inside the one that we opened. And
8 the samples came back with heavy levels.

9 Q. Now, these rooms are not separated by any
10 smoke walls, is that correct?

11 A. Well, they have what's called a demising
12 wall between them. And I think they were
13 intended originally in construction to possibly
14 be that, but they don't meet -- they would have
15 met the requirement in circa '72 for a unit
16 separation wall. They don't meet the current
17 requirements at the time of the loss for a unit
18 separation wall or a smoke wall, both in the
19 way that they were originally constructed and
20 how they meet at the ceiling level with the
21 corrugated metal. That's all open. I talked
22 about that. But there's also penetrations that
23 have been drilled and knocked through there for
24 running water and plumbing, and none of that
25 was ever sealed. So everything communicates

1 with each other.

2 Q. When you say "everything communicates,"
3 does smoke travel down those open areas?

4 A. Absolutely. It looks for those bypasses,
5 particularly when you add positive pressure.

6 Q. What is an open atmosphere structure?
7 We've had that terminology in this case.

8 A. Open atmosphere structure is exactly what
9 this building is, one side of the building
10 communicates with the other.

11 Q. All right. And was it your opinion that
12 the particulate matters from the smoke from the
13 soot caused the need to basically tear down
14 these walls, replace them because there's no
15 real way to get in there and clean them?

16 A. No --

17 MR. TAYLOR: Object to the form of
18 the question.

19 Excuse me.

20 THE WITNESS: No, there is no way to
21 get in there and clean them.

22 BY MR. CONCHIN:

23 Q. All right. I saw where your report had
24 damage, smoke damage extending to both sides of
25 the fire room. Let me ask you: Did -- the

1 Sumner report, I noticed they did not even test
2 the fire room. Did you notice that?

3 A. Yeah, they didn't do cause and origin. My
4 other concern with looking at their photos is
5 when they -- they indicated that they -- in the
6 verbal part, they indicated that they used a
7 knife to cut squares through the walls and yet
8 their photos show where they punched through
9 the wall and then they did a wipe. And the
10 problem with that that we have found is that
11 you are aerosolizing that Sheetrock dust. And
12 the Sheetrock dust will skew your results by
13 adding additional background dust that might
14 not have been there before. That's why we use
15 the sterilized tube technique when we vacuum.
16 We vacuum with that sterilized tube facing
17 upward so that we're sucking air upward, not
18 downward where there would be settled dust. So
19 we think we're getting a much more active
20 result of what's in that cavity. So I was
21 concerned about -- their methodology concerned
22 me when I saw their pictures.

23 Q. They literally, according to the pictures,
24 busted through the wall, did they not?

25 A. Yeah, it's kind of the old

1 search-and-destroy method where you just break
2 it open. And that to me would be problematic.
3 What we would have done if we -- and we do
4 plenty of these. What we would do is we would
5 wet the surface of the Sheetrock. And then as
6 we're cutting, we would have a spray bottle so
7 we're actually spraying the edge of this so
8 that the dust stays there, and then we do our
9 wipe. And that did not appear to be done in
10 any of their stuff.

11 Q. Okay. Ask you a couple of opinions here.
12 Do you have an opinion that removal of all the
13 wall and ceiling finishes, A/C units in the
14 affected rooms, cavity installations, carpet,
15 ceiling tiles, concrete slabs, exposed framing
16 members -- do you have an opinion whether all
17 of that should occur in the remediation and
18 repair of the facility?

19 MR. TAYLOR: Object to the --

20 THE WITNESS: Yes.

21 MR. TAYLOR: -- form of the
22 question.

23 THE WITNESS: Yes, it should.

24 BY MR. CONCHIN:

25 Q. All right. And we're talking about the

1 fire facility, are we not, please, sir, here?

2 A. Yes, we are.

3 Q. All right. Soot in open conduit in the
4 CMU wall cavities and the wiring issue, I think
5 you've testified to this, but is there any
6 other way that you know to take care of that
7 problem, remediate it, remove it, other than
8 just tearing it down and starting all over?

9 MR. TAYLOR: Object to the form of
10 the question.

11 Go ahead.

12 THE WITNESS: No, there is not. And
13 one of the concerns on a level four sample, if,
14 in fact, they had provided us with the chemical
15 analysis, we would look for chlorine. The
16 wiring has a plastic covering on it. And that
17 product, when it melts or it is damaged,
18 off-gases chlorine. And so it's a poly --
19 what's it called? PVC basically, polyvinyl
20 chloride wrapping. So we look for those
21 signature patterns in those level four samples.
22 That would be an indication that there is
23 wiring damage.

24 BY MR. CONCHIN:

25 Q. All right. I appreciate your patience.

1 I'm going to try to wrap up here. Looks like
2 your crews were there three days. You were
3 there on two separate occasions. And I'm just
4 looking at your cover letter dated April 26,
5 2019. And was all the work done there based
6 upon your background experience and the
7 experience level of those people that did the
8 actual onsite inspections, please, sir?

9 A. Yes.

10 Q. In other words, are they qualified to do
11 what they did?

12 A. Absolutely.

13 MR. TAYLOR: Object to the form of
14 the question.

15 BY MR. CONCHIN:

16 Q. You made an actual inspection in the field
17 on, what, two occasions?

18 A. Yes.

19 MR. TAYLOR: Gary, I'm sorry to
20 interrupt, but the receptionist just popped her
21 head in and she says she needs me for a second.
22 Everybody saw it. He was in the room.

23 MR. CONCHIN: Can she wait five
24 minutes?

25 MR. TAYLOR: Well --

1 MR. CONCHIN: Whatever.

2 MR. TAYLOR: She went back out.

3 So --

4 MR. CONCHIN: Whatever.

5 MR. TAYLOR: Could we just go off
6 the record for just a minute, please, so I can
7 figure out what this is all about?

8 MR. CONCHIN: Whatever.

9 THE VIDEOGRAPHER: We're going off
10 the record.

11 The time is 4:53 p.m.

12 (Recess.)

13 THE VIDEOGRAPHER: We are going back
14 on the record.

15 The time is 4:53 p.m.

16 BY MR. CONCHIN:

17 Q. All right. Did you use methodology
18 generally recognized in your industry?

19 A. Yes.

20 Q. You have considerable construction
21 experience also, do you not, in addition to the
22 other -- the investigative experience that you
23 have done the last 35 years -- I'm asking about
24 general contracting and construction
25 experience, correct?

1 A. Yes, I worked in the field of
2 construction. Yes, there's nothing on this
3 project in terms of the rebuild that I couldn't
4 physically do myself under any limitations
5 based on my health, but I certainly have the
6 knowledge and the skill set to do it.

7 Q. Okay. Your testimony is based on -- did
8 you have enough -- did you have sufficient
9 facts and data to arrive at your opinions,
10 please, sir?

11 A. Yes.

12 Q. Did you -- you talked about the standard
13 ASTM E2128, is that a recognized reliable
14 methodology, please, sir?

15 A. Yes, it is.

16 Q. And you've relied -- have you relied upon
17 those principles and methods and methodologies
18 set forth under ASTM E2128 enough to know that
19 it is the standard, the generally accepted
20 standard in the industry, please, sir?

21 MR. TAYLOR: Object to the form of
22 the question.

23 BY MR. CONCHIN:

24 Q. You can answer.

25 A. Yes.

1 Q. In your knowledge, whether it relates to
2 some journal article or anything else, your
3 knowledge is based upon your specialized
4 knowledge -- your opinions are based upon your
5 specialized knowledge in what you do in this
6 industry, is it not, please, sir?

7 MR. TAYLOR: Object to the form of
8 the question.

9 THE WITNESS: Yes, it's based on my
10 training, education and experience.

11 BY MR. CONCHIN:

12 Q. All right. And that training in the
13 construction industry has continued since the
14 construction company case, correct?

15 A. Yes.

16 Q. All right. Are the principles and the
17 methods you relied upon reliable in your
18 opinion, please, sir?

19 MR. TAYLOR: Object to the form of
20 the question.

21 THE WITNESS: Well, the courts
22 certainly have thought so.

23 BY MR. CONCHIN:

24 Q. All right, sir. And your report,
25 Exhibit 32, I believe it is, that relates to

1 the wind claim --

2 A. Yes.

3 Q. -- is that correct? All right. Is that
4 report -- is that your work product kept in the
5 normal course of business, business record of
6 FBS?

7 A. Yes.

8 MR. TAYLOR: Object to the form of
9 the question.

10 THE WITNESS: Yes.

11 MR. CONCHIN: Since you objected to
12 the form of that question, I'm going to go back
13 and ask that again. I'll ask three questions
14 instead of one. I thought we were going to
15 move this thing over.

16 MR. TAYLOR: Well, that's fine,
17 Gary, but it's still -- parts of the report --
18 he's already testified that parts of the report
19 were not drafted by him that were -- portions
20 were done by just Mr. Johnson. That's why I --

21 MR. CONCHIN: He has never -- he has
22 never said that's not a business record. And
23 that was my question.

24 MR. TAYLOR: Okay. Well, I
25 apologize. If that's all you're trying to

1 establish, that's fine, Gary. I didn't think
2 that that's what you were getting at.

3 MR. CONCHIN: That's what I asked.

4 BY MR. CONCHIN:

5 Q. Is that a business record of FBS?

6 A. Yes, FBS owns this report.

7 Q. And the engineering aspects of it are
8 verified by an engineer, a qualified engineer
9 at the time, is that fair?

10 MR. CONCHIN: Object to the form of
11 the question.

12 THE WITNESS: Yes. Mr. Johnson is
13 actually a level above most engineers. He is
14 both a civil engineer, and he is a structural
15 engineer. He has passed the S.E. test, so he
16 is that next level up.

17 BY MR. CONCHIN:

18 Q. All right. Sir, and he is a licensed
19 P.E., correct?

20 A. Yes.

21 Q. Did you -- and Mr. Johnson, did you-all
22 peer review each other as far as formulation of
23 the final document, please, sir?

24 A. Absolutely.

25 Q. THG's estimate, The Howarth Group, have

1 you reviewed its scope and its appropriateness
2 in scope, please, sir?

3 A. Yes, I have.

4 Q. Do you agree with it based upon your
5 [unintelligible] and cost and general expense,
6 please, sir?

7 A. Yes. My only question of it might be --
8 they might be a little deficient in the amount
9 of insulation that will be required by code.
10 And I don't know if -- again, I'm speaking of
11 this from the standpoint I have no idea if
12 there is code coverage or ordinance and law
13 coverage, and that's the way it's addressed the
14 way it is. But provided there is adequate
15 ordinance and law coverage, the insulation
16 number would typically go up.

17 Q. And as far as -- let's move ahead to the
18 last time you were on the premises. Would you
19 characterize -- how would you characterize the
20 status of that property from a loss standpoint,
21 please, sir, the last time you saw it?

22 A. Scary.

23 Q. Would you characterize -- is there
24 anything salvageable there that you could see,
25 please, sir, as far as the -- I'm not talking

1 about the foundation or anything. I'm talking
2 about the structure.

3 A. The foundation, the exterior walls, which
4 are concrete, are probably salvageable. Other
5 than stuff that has been damaged by soot that I
6 have talked about, those are typically interior
7 demising walls. There is a great concern on
8 the metal roof deck based on the amount of
9 water that we found when we sampled. We talked
10 about this in our report. We expect that the
11 upper side of the roof deck that you can't see
12 is going to be severely rusted. I don't know
13 if Howarth is replacing that entire deck. I
14 can't recall if they are sandblasting the deck
15 and replacing a percentage of it. But there's
16 going to have to be work done on that metal
17 roof deck to put a new roof back on. I think
18 that windows and doors that are not damaged can
19 probably be reused. The issue really is going
20 to be, and I talk about this in my report, is
21 we think that the value of the building as it
22 sits minus the land is going to be more than
23 50 percent of the cost to repair, which under
24 the building code is called a substantial
25 damage qualifier. And as a result of that, the

1 entire building would have to be brought up to
2 code, which means it would likely have to be
3 sprinkled, all of those windows and doors would
4 have to be replaced because they don't meet the
5 energy code, all of those demising walls that
6 are not -- don't meet current code are going to
7 have to be redesigned or plugged or filled so
8 that they are separation walls. I don't know
9 if Howarth contemplated all of that in his
10 estimate.

11 Q. All right, sir. Speaking of codes, you've
12 got how many years of experience in working
13 with and actually being on code committees?

14 A. Well, since 2006. But prior to that, in
15 my very first case 35 years ago, I testified on
16 code. I've always testified to code and have
17 been looked at in the industry as having a
18 disproportionate knowledge to code. Minnesota
19 is the only state that licenses code officials.
20 If other states did, I would apply for those
21 licenses.

22 Q. And you may not know this, but just -- was
23 the Bessemer -- the International Building
24 Code, did that apply to Bessemer, this
25 particular Knights Inn property?

1 A. Yes, it does.

2 Q. All right. And so based upon the fact
3 that this was a pre -- was this a
4 pre-International Building Code facility?

5 A. Yes, it was.

6 Q. All right. But now if it is rebuilt, if
7 it is in some way repaired or replaced, it
8 would have to -- your understanding of the
9 code, they would have to bring everything,
10 electrical, everything up to the current
11 International Building Code?

12 A. Yes, they would --

13 MR. TAYLOR: Object to the form of
14 the question.

15 THE WITNESS: Yes, they would based
16 on the 50 percent rule.

17 BY MR. CONCHIN:

18 Q. All right, sir. Last question. Causation
19 on page 12 of 24 of your fire report.

20 A. Okay.

21 Q. Okay. And that is Exhibit 36. We've been
22 talking about 32. And I am going to --

23 MR. CONCHIN: To clarify, I'm
24 offering 32. I'm also going to offer to the
25 deposition if -- if any of these have not been

1 offered -- I assumed you might offer them all.

2 BY MR. CONCHIN:

3 Q. But 36, do you stand by your causation
4 findings on the -- on page -- rather than me
5 read them, we can read them, but do you stand
6 by those causation findings on page 12 of 24,
7 please, sir?

8 A. So page 12 of 24 in Defendant's Exhibit 32
9 is actually the causation statement for the
10 wind claim, not the soot, not the fire claim,
11 but yes.

12 Q. Okay. 32, page 12, do you stand by
13 those -- in your wind claim, do you stand by
14 your causation statements?

15 A. Absolutely.

16 Q. And Exhibit 36, if I have it correctly,
17 which would be the fire claim report, do you
18 stand by your causation statement, which is, I
19 believe, also page 12 of 24?

20 A. The fire report does not have a causation
21 statement per se, Exhibit 36. It has a
22 conclusion.

23 Q. Sorry. You're right. I got the -- too
24 many documents here. On the fire report
25 conclusion, you stand by your conclusions,

1 please, sir?

2 A. Yes, I do, as well as the scope -- the
3 recommended initial scope of repair.

4 Q. All right, sir.

5 MR. CONCHIN: There's a lot more I
6 could and should ask you, but I just -- I'm
7 going to stop, and I appreciate your patience.
8 Tom and the court reporter and everybody, thank
9 you for your patience.

10 MR. TAYLOR: Just a couple of
11 questions.

12 We need to go off the record. The
13 court reporter needs to make a call.

14 (Off the record.)

15 THE VIDEOGRAPHER: We are going off
16 the record.

17 The time is 5:05 p.m.

18 (Off the record.)

19 THE VIDEOGRAPHER: We are going back
20 on the record.

21 The time is 5:06 p.m.

22 FURTHER EXAMINATION

23 BY MR. TAYLOR:

24 Q. Mr. Irmiter, is there anything in your
25 report where you discuss Mr. Sumner's report?

1 A. No. I had not reviewed his report prior
2 to issuing our reports, so I have not offered a
3 rebuttal report per se.

4 Q. Okay. Is there any mention of
5 Mr. Mulder's report in either of the reports
6 that you prepared?

7 A. No. I did not have access to that report
8 prior to issuing my report.

9 Q. And -- but you have -- since then have had
10 access to them, right?

11 A. Yes, I have.

12 Q. And you did not issue a supplemental
13 report?

14 A. I have not been asked to do that, no.

15 Q. And do either of your reports mention
16 anything in connection with Mr. Howarth's
17 estimate?

18 A. I do not believe they do.

19 Q. And have you prepared a supplemental
20 report that addresses Mr. Howarth's estimate?

21 A. No.

22 MR. TAYLOR: I have nothing further.

23 MR. CONCHIN: Okay. Nothing
24 further. Thank you, everybody.

25 MR. TAYLOR: Thank you very much.

1 THE VIDEOGRAPHER: This concludes
2 today's deposition.

3 We are going off the record at
4 5:07 p.m.

5 (Deposition concluded at 5:07 p.m.)

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REPORTER'S CERTIFICATE

[illegible]

I hereby certify that I reported the deposition of Thomas J. Irmiter on December 27, 2019, in Minneapolis, Minnesota, and that the witness was by me first duly sworn to tell the whole truth;

That the testimony was transcribed by me
and is a true record of the testimony of the
witness;

That the cost of the original has been charged to the party who noticed the deposition, and that all parties who ordered copies have been charged at the same rate for such copies;

That I am not a relative or employee or attorney or counsel of any of the parties, or a relative or employee of such attorney or counsel;

That I am not financially interested in the action and have no contract with the parties, attorneys, or persons with an interest in the action that affects or has a substantial tendency to affect my impartiality;

That the right to read and sign the deposition transcript by the witness was reserved.

WITNESS MY HAND AND SEAL THIS 13th day of
January, 2020.

Dana Anderson

Dana S. Anderson-Linnell
Notary Public, Hennepin County, MN
My commission expires 1/31/2020

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[yeah - zoomed]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1,

2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

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Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

HAMAN, INC. d/b/a KNIGHTS INN,)
)
Plaintiff,)
)
) Civil Action File No.
) 2:18-CV-01534-JHE
)
v.)
)
CHUBB CUSTOM INSURANCE)
COMPANY,)
)
Defendant.)

NOTICE OF DEPOSITION OF THOMAS J. IRMITER

TO:	Gary V. Conchin Kenneth B. Cole, Jr. Franklin Taylor Rouse Conchin, Cloud & Cole, LLC 2404 Commerce Court SW Huntsville, Alabama 35801 gary@conchincloudcole.com kenny@conchincloudcole.com	Gregory A. Brockwell Jason R. Smith Brockwell Smith LLC 2100 1st Avenue North, Suite 300 Birmingham, Alabama 35203 greg@brockwellsmith.com jay@brockwellsmith.com
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YOU ARE HEREBY NOTIFIED that, on **December 27, 2019** beginning at **9:00 a.m. (C.S.T.)** at the offices of **Meagher & Geer, PLLP, 33 S. Sixth Street, Suite 4400, Minneapolis, MN 55402**, counsel for defendant Chubb Custom Insurance Company, pursuant to Rules 26 and 30 of the Federal Rules of Civil Procedure and the Local Rules of this Court, will take the deposition upon oral examination of **THOMAS J. IRMITER** for purposes of discovery, cross-



examination, preservation of testimony, and all other purposes permitted under the Federal Rules of Civil Procedure. The deposition will take place before an officer duly authorized by law to administer oaths and to take and transcribe depositions. The deposition will continue from day to day until it is completed.

This 3rd day of December, 2019.

/s/ Wayne D. Taylor

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Chubb Custom Insurance Company

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION

HAMAN, INC. d/b/a KNIGHTS INN,)	
)	
Plaintiff,)	
)	
)	Civil Action File No.
)	<u>2:18-CV-01534-JHE</u>
)	
v.)	
)	
CHUBB CUSTOM INSURANCE)	
COMPANY,)	
)	
Defendant.)	

CERTIFICATE OF SERVICE

I hereby certify that a copy of the **NOTICE OF DEPOSITION OF THOMAS J. IRMITER** was electronically mailed to the following counsel of record:

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-and-

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Attorneys for Plaintiff Haman, Inc. d/b/a Knights Inc.

This 3rd day of December, 2019.

/s/ Wayne D. Taylor

WAYNE D. TAYLOR

Georgia Bar No. 701275

Admitted pro hac vice

EXHIBIT "C"





Forensic Building Science, Inc.

Causation, Scope of Repair and Code Submission

Insured: Haman, Inc.

Insurance Company: Chubb Custom Insurance Company

Dates of Loss: March 22, 2014 and April 28, 2014

Property: Knights Inn at 1121 9th Ave. SW, Bessemer, AL 35022

This Report includes the opinions that I have regarding causation, scope of repairs applicable codes for the 2- losses to the Knights Inn owned by Haman, LLC. that resulted from the fire loss of March 22, 2014 and the windstorm/hail loss of April 28, 2014. Forensic Building Science conducted inspections of the property on July 7-9, 2015. Prior to that inspection, I made a brief scoping site visit on June 15, 2015 to establish the eventual inspection protocols. In addition, and prior to issuing this report, I re-inspected the property on April 24, 2019 to refamiliarize myself with the property.

This Report also includes the sources relied upon for my opinions, my qualifications, my past testimony and my fee schedule. I reserve the right to supplement or expand this opinion statement as I believe necessary on the merits of any additional information that becomes available.

Testimony I have given over the last four (4) years is listed in the enclosed CV.

Thomas J. Irmiter

April 26, 2019

Thomas J. Irmiter

2168 Juliet Ave, St. Paul, MN 55105
teirmiter@forensicbuildingscience.com
T: 651-222-6509
4/23/19

Licenses/Certifications

State of Minnesota Building Official, <i>License# LB002764</i>	2006-22
International Code Council, Residential Building Inspector, <i>Certification# B1</i>	2008-21
International Code Council, Property Maintenance & Housing Inspector, <i>Certification# 64</i>	2008-21
International Code Council, <i>Professional Member# 5313388</i>	2007-08
International Code Council, <i>Corporate Member# 8053289</i>	2015-22
Insurance Appraisal & Umpire Association Member and Certified Appraiser/Certified Umpire	2017-19
Metro Skywarn Spotter, <i>ID# 7154</i>	2015-17
Certified Vinyl Siding Installer, <i>ID# 18025</i>	2015-18
Certified Renovator- Lead Safety	2015-22

Work Experience

Forensic Building Science, Inc., Owner/Principal

2004 to Present

- Forensic analysis and evaluation of water intrusion behind exterior boundary walls on residential single-family, two-family, multi-family dwellings and commercial low rise and high-rise buildings.
- Causation analysis of failed foundation, wall, floor, curtain wall and roof assemblies
- Evaluation of Codes and Standards including manufactures requirements
- Evidence collection and on-site documentation of remediation and repairs
- Producing project specifications
- Construction and Insurance dispute resolution and Arbitration
- Fenestration and curtain wall testing and deconstruction
- Causation analysis
- Project management and project cost estimating using Industry standard methods
- Staged site inspection and documentation on new homes and structures undergoing renovations and repairs including footing, framing, weather barrier, roofing, fenestrations inspections, and insulation and ventilation inspections
- Comparative bids and job cost analysis and project scope analysis
- Bulk mold, soot, and lead sampling
- Infrared and moisture infiltration studies
- Clean room design defects
- Review and evaluation of construction documents
- Inspection on first-party losses including fire, wind, hail, ice dams, hurricanes, tornadoes, floods, pipe burst, vehicle impact
- First-party loss claim inspections for building owners and insurance companies
- Pitched and flat roof and facade inspections including EPDM, copper, metal standing Seam, TPO, BUR, Mod Bit, shingles, tile, slate, flashing, stucco, EIFS, brick, stone, vinyl siding, Hardi-composite siding, wood siding and CMU.
- Insurance appraisals as umpire and appraiser
- Pre-sale due diligence inspections

As principal of FBS, Mr. Irmiter conducts on-site inspections and evaluations (both non-invasive and destructive) of foundation assemblies, wall assemblies, curtain and storefront walls, soffit assemblies and attic/roof assemblies to evaluate as-built conditions and determine causation for damages to these various assemblies. Preparing project specific repair scopes and unit price estimates as well as obtaining and reviewing bids from licensed contractors are also part of Mr. Irmiter's duties. Evaluation of applicable codes and standards in place at the time of original construction and at time of a loss, as well as, expert witness testimony regarding causation for both Federal and district court cases and first party appraisals, scope of repairs and applicable building codes and standards are also part of Mr. Irmiter's work.

Mr. Irmiter has conducted inspections in Alabama, Arizona, Arkansas, Colorado, California, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Mexico, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Mexico, New York, New Jersey, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Virginia, and Wisconsin.

Advanced Building Solutions, Inc., Senior Consultant

2003-04

- Construction litigation consulting
- Principal expert witness for the company
- Forensic analysis of construction defects, including on-site testing
- Window deconstruction
- Building code evaluations
- Water intrusion studies and reports
- Water penetration testing
- Expert witness on three arbitrations and two court cases
- 8 depositions and numerous affidavits
- 15 mediations
- Final analysis of damages
- First party disputes

Responsible for on-site forensic destructive testing to determine problems related primarily to bulk water intrusion. Review all evidence gathered from full remediation projects and issue pertinent reports. Maintain and update a database of project costs representing a cross-section of contractors and project types. Research and test various products used to construct wall assemblies. Develop and maintain a protocol for destructive evaluations of fenestrations. Assist in developing and implementing "Best Practices" and protocols for remediation projects including partner contractor training.

Donnelly Management Services, Inc., Forensic Architectural Specialist

2002-03

- Developed concept of a service to represent home owners experiencing failures to their homes as a result of water infiltration issues
- Created initial "Best Practices" for Donnelly Stucco for their involvement in the full remediation process
- Documented and issued pertinent reports on discoveries at failed structures, both residential and commercial
- Established and maintained protocols for on-site documentation and evidence gathering and storage
- Principal expert witness for company
- Established template for water intrusion reports including creation of terms in use by other consultants today

- Created some of the first full remediation specifications and templates in use by other firms today
- Developed a percentage of damages theory used in mediations today
- Developed a unit cost template still used by others today

Donnelly Stucco Sales, Sales Manager

2001-02

- Residential and commercial stucco sales and design for traditional 4-coat, proprietary 2-coat, and EIFS systems
- Daily sales for residential re-stucco and stucco related repairs
- Initial forensic destructive testing in spring of 2002
- On-site, hands-on involvement in remediation and reconstruction process
- Management of sales leads
- Maintain company marketing program
- Prepare all estimates including new construction stucco work
- Prepare and execute contracts
- Assist clients with color and texture designs
- Attend pre-job meeting with client and Donnelly plastering staff person
- Worked in the field as an installer from time to time

Irmiter Contractors & Builders, Ltd., President

1984-00

Company received numerous local and national awards for design, management and implementation until unsuccessful merger acquisition of House of Dreams, LLC in 2000. This acquisition caused the company to close in January 2001.

In 1984, Mr. Irmiter purchased the assets of his father's sole proprietor business and formed Irmiter Contractors and Builders, Ltd. His training and education included:

- Application of Building Codes and Standards into practical field applications
- Advanced framing using floor truss systems
- Installation of flanged windows
- Installation of new product from Dupont called Tyvek
- Job sequencing and project scheduling
- Xactimate training and use
- Introduction to CAD design
- Use of Simpson fasteners and connectors to obtain structurally rated assemblies
- Point load design
- Requirements for Historic Restoration
- Steel beam and column construction
- Insulation and ventilation techniques
- Calculating loads on wall, floor and roof assemblies including mathematical formulas
- Blue print reading and materials take-offs
- Building codes and standards by geographic region including UBC, BOCA, WDC and Model Energy Code
- Administration of construction projects
- Construction contracts and project specifications
- Fastening schedules for various components including, studs, plates, headers, sheathing, lath, weather barriers, and ledgers
- Calculating live load, dead loads, and snow loads
- Site layout and drainage

- Basic mechanical and electrical
- Received 100 hours of field training from Chevron Corporation on use of Chevron Industrial Membrane (CIM) for use on flat roof applications and pond liners. Install CIM product on over 50 residential and commercial structures over a four-year period. Product used to replace standard five-ply hot mop systems in place at the time. Included specific training on wall-to-roof flashing details, flashing at posts and penetrations, pitch pockets and special applications on vertical surfaces
- Received 40 hours training from manufacturer of EPDM systems including ballast system install, mechanical fastener install, and full adhesion system install. Installed various system membranes on flat roofs for ten-year period, including BUR and Mod Bit
- Received over 100 hours of training from Marvin Windows and their representatives, including John Taylor, on proper installation for and of Marvin windows and doors including sizing, measuring, layout, field mulling, structural field mulling, and designing window walls
- Direct training by Velux America through the W.J. White Company in Bloomington, Minnesota on installation and field service modification of Velux roof windows. 40-hour training included modification of engineered trusses for installation of oversized skylights, complex framing of skylight shafts, proper flashing techniques for skylights and roof windows on sloped and non-sloped roofs, and gable framing and flashing of skylights and roof windows. Personally, spent five years (approximately 3000 hours) trouble shooting and repairing improper insulations (leakers) in five state area, including commercial applications. Developed and installed first gang-flash system using low pitched roofing kit on flat roof; still in use today. Installed over 1500 roof windows and skylights from 1980-1990 including low-sloped applications
- Direct training by Solarium Systems Inc, Bloomington, Minnesota, Lord and Burnham Greenhouse Systems and Four Seasons Greenhouse through W.J. White Company for:
 - Erection and construction of glass solariums
 - Six-month training period (1000 hours) included both class room and actual hands-on training on manufacturing at the plant
 - Including cutting extrusions
 - Installing weep tracks
 - Installing glazing tapes and glazing panes
 - Installing mull covers
 - Integration of operable fenestration components including windows doors and fan systems
 - Building and designing heat sink collectors using insulated slab on grade and wood foundations
 - Heat wall and trompe wall designs
 - Complex hip unit solariums and multiple unit designs and structurally rated extrusions and where to use these
 - Spread mull techniques and structurally rated mull assemblies
 - Integrating site built and erected solariums into wall and roof assemblies and proper flashing techniques
 - Installed over 100 solariums and solariums component systems for W.J. White during five-year period on both residential and commercial structures

Bud Irmiter Remodeling, Master Carpenter

1976-84

Worked full-time as a lead carpenter supervising numerous crews. Additional training included:

- Specification writing
- Blue print reading and materials take offs for complex projects
- Integration of subcontractors and project scheduling
- Proper job sequencing

- Design and installation of wood foundation systems
- All aspects of framing
- Advanced electrical rough in
- Re-supporting houses with off-set bearing walls
- Re-supporting failed and sagged footings, posts, beams and wall structures
- Changing structural bearing points
- Interior finishing trim including stair construction
- Multi-level deck design
- Advanced cabinet making
- Cabinet and countertop lamination
- Advanced plumbing including relocation of and offsetting of soils and waste pipes
- Working with poly retarders and un-faced insulation
- Training and installation of EPDM roofing and related materials
- Installing windows and doors
- Installing various types of siding
- Installing roofing products

Bud Irmiter Remodeling, *Apprentice Program*

1969-76

Received the following extensive training:

- Masonry
- Carpentry – which including all aspects of framing, siding, windows and roofing
- Stucco and brick
- Electrical, plumbing and heating
- Interior plastering and decorating
- Cabinet making
- Roofing (standard shingle, cedar shake, tile, slate, flashing details, chimney rebuilding and tuck pointing, BUR)

Specific duties and training in:

1969-71

- Clearing job sites particularly on the residential roofing projects
- Learning to properly stack and cover framing lumber
- Installing mop down starter edge and 90 lbs. rolled roofing (this was prior to the development of ice and water shield)
- Installing 18-inch lap to the weather rolled roofing on flat and slightly BUR (this was prior to EPDM membranes)
- Scrapping and priming exterior homes
- Sanding gypsum board
- Cutting and installing ceramic tile
- Concrete mixing

(Except for 10-month City of Minneapolis Internship)

1971-95

- Advanced framing including layout of floors, walls, roof structures, bearing points, point loads, stairs etc.
- Installation of metal roof flashing and underlayment flashing
- Installation of three-tab shingles and metal valleys
- Tuck pointing chimneys, rebuilding chimneys and chimney flashing
- Construction of chimney saddles and crickets
- Installation of lead flashing on tile roofs and tile and slate roof repairs
- Solder jointing metal roofing

- Inboard gutter repair and rebuilding
- Surface mounted gutter installations
- Foundation water proofing
- Wall framing and layout
- Installation of weather resistive barriers
- Installation of Kraft Faced insulation
- Gypsum board installation
- Fire taping Gypsum board
- Interior and exterior painting and staining
- Glass and sash chord replacement
- Repair and rebuilding of double hung windows
- Selection of wood and basic cutting of components for cabinet making
- Excavation and site preparations
- Foundation and footing layout
- Footing installation, including post, ledge and spread footings
- Block installation
- Installation of drain tiles
- Wood and steel siding installation
- Plywood and Bildrite sheathing installation
- Installation of lath and stucco
- Stucco re-dashing
- Gypsum board taping and plaster repair
- Spray texturing
- Wall papering and painting including faux and glazing
- Removal of lead and galvanized water pipes and installation of copper water pipes
- Removal and installation of hot water boilers
- Installation of carpet and linoleum
- Installation of wood floors including floor refinishing
- Stripping and refinishing wood work
- Retrofitting new headers without installing temporary support walls
- Advanced cabinet making including mortise and tenon work
- Basic electrical rough in

Office of Public Information, City of Minneapolis, Director

1977-78

Reported directly to City Clerk, Lyle Schwarzkopf. Managed staff of eight people. Responsible for publishing monthly city employee newsletter. Assisted in lobbying effort for proposed stadium in Downtown Minneapolis. Received training from federal energy agency for thermography study regarding heat loss in residential structures; including extensive training on interpreting infrared images, convective loops and negative plain pressure as these relate to improper insulation and ventilation procedures and percentage of heat loss attributable to wall and roof assemblies. Implemented and delivered secondary training to citizens in local wards for presentation of the thermography images that were taken by the federal energy agency in conjunction with the Department of Housing and Urban Development (HUD). Personally, inspected approximately five homes in each ward (total of 50) to verify accuracy of testing procedures and make recommendations for proper insulation and ventilation of the attic areas.

Construction Consulting Experience

1985 to Present

- Expert witness testimony for both Plaintiffs and Defendants
- Destructive inspections on over 2500 residential properties
- Inspection of over 7500 Buildings
- WCCO (CBS Affiliate) I-Team investigation of local Home Builders on "Houses from Hell", Pajec Residence, Apple Valley, Minnesota (1991)
- Principal designer for ICB, Ltd. on over 1500 residential and commercial remodeling and renovation projects
- Developed installation strategies for Andersen Renewal Windows, including changes in flashing and flange designs
- Named by Hennepin County District Court Judge in 1998 to serve as sole arbitrator on construction dispute between Silver Bullet Construction and one of their clients
- Consulted for Marvin Windows only window store in St. Louis, Missouri for four years
- Consulted for the NAHB Research Center in Washington D.C. for four years
- Consulted with Malcolm Baldrich Institute in Washington D.C. and was part of five-person team to develop national quality standards for residential construction

Guest Lecturer

1986 to Present

- National Convention for NARI, 1986 – 1999
- International Symposium on Sustainable Housing Insulation in Northern climate houses, 1988
- City of St. Paul. District 14 Council, Annual Remodeling Exposition, 1990 - 1995
- National Conventions for NAHB, 1990 - 1998
- National Convention for NKBA, 1990 – 1998
- Remodelers Council: Anderson Windows, Marvin Windows, and Covey Institute, 1990 - 1999
- National Leadership Conference – Construction Management, Sponsored by NAHB, Hanley Wood, Andersen Windows, 1998
- ASHI – How to Inspect for Water Intrusion Current Methodologies, 2003
- Mold Summit, Chicago IL, 2005
- 54th Annual IBC Officials Meeting
- IFMA – Evaluating Existing Buildings – Ordinance & Law Issues in Insurance Policies
- Annual Building Officials Institute Guest Lecturer
- Annual Meeting Presenter for NARI, 2016
- GAPIA Fall Educational Conference Speaker, 2016
- NAPIA Mid-Year Meeting Presenter, 2017

Education

- | | | |
|--|---|------|
| • Hamline University | Bachelor of Arts Degree | 1979 |
| • AWCI International | Mold Remediation and Site Documentation | 2002 |
| • University of Wisconsin
(School of Engineering) | Advanced Project Management Class | 2007 |

Advanced Product Training Seminars and Courses

2007

- State of Minnesota Department of Labor and Industry
(40 hours, Test for Certified State Building Official (CBO LTD) (Limited to one and two family residential, and small commercial and accessibility codes))
- Received designation as RBI for the ICC. Lic. No. 5313388-B-1

Solarium Systems, Inc., Lord and Burnham Green, and Four Seasons

1986

- Erection and construction of glass solariums
- Six-month training (1000 hours) included both classroom training and actual hands on manufacturing at the plant
- Including cutting extrusions
- Installing weep tracks
- Installing glazing tapes and glazing panes
- Installing mull covers
- Integration of operable fenestration components including windows doors and fan systems
- Building and designing heat sink collectors using insulated slab on grade and wood foundations
- Heat wall and trompe wall designs
- Complex hip-unit solariums and multiple unit designs and structurally rated extrusions and where to use these
- Spread mull techniques and structurally rated mull assemblies
- Integrating site-built & erected solariums into wall & roof assemblies & proper flashing techniques

National Association for the Remodeling Industry (NARI)

1989-02

- Advanced framing using floor truss systems
- Installation of flanged windows
- Supplemental Xactimate training
- New product from DuPont called Tyvek
- Job sequencing and project scheduling
- Introduction to CAD design
- Use of Simpson fasteners and connectors to obtain structurally rated assemblies
- Insulation and ventilation techniques

1989-2006 – Attended NARI Annual convention and took a minimum 12 hours (200 plus hours) CEUs each year on the following:

- Weather resistive barriers, including “D” paper, Pink wrap and Typar
- Window and door flashing
- CAD design
- Computer aided estimating –“Xactimate system”
- Peachtree estimating system
- Xactimate training
- Vapor retarders
- Insulation
- Ventilation
- Roofing – EPDM, TPO, Mod Bit, steel, metal & Elastomeric
- Fasteners and connectors
- Compute aided structural analysis
- Caulks and sealants
- Tyvek, including an additional 10 hours direct training by Dupont in Florida in 1999 on new product call stucco wrap and flex wrap.
- MFM brand window tape seminar
- Pella Window Tape Seminar 2002, Indianapolis, Indiana
- Building Science Corporation, Joe Listerbeck, water intrusion diagnosis and repair, 2002, Indianapolis, Indiana
- Complex framing using LPI and TJI joists and connectors

- Using OSB as a structurally rated panel
- Barrier free design
- Proper installation of kick-out flashing, AWC, 2002, San Antonio, Texas
- What causes mold? AWC 2002
- Plaintiffs Mold Summit 2005 (16 hours training)

National Association for the Remodeling Industry Certified Remodeler Test

1990

- Calculating loads on wall, floor and roof assemblies
- Blue print reading and materials take-offs
- Building codes and standards by geographic region including UBC, BOCA, WDC and Model Energy Code
- Administration of construction projects
- Construction contracts and project specifications
- Fastening schedules for various components including, studs, plates, headers, sheathing, lath, weather barriers, and ledgers
- Calculating live load and dead loads and snow loads
- Site layout and drainage
- Basic mechanical and electrical

State of Minnesota Continuing Education:

1993-2000: 42 hours CEUs, to maintain contractors' license

- Additionally, taught classes required for contractor continuing education including Lead Safety Training. At that time, Mr. Irmiter was the only non-State of Minnesota Department of Health person qualified by the Department of Commerce to teach Lead Safety Training.

Code Official Licensing Requirements:

2019: Attended 63rd Annual Institute for Building Officials. 35 CEUs

- State of the State
- Understanding the Roles of Participants in Emergency Response to Catastrophic Damage
- Firestop from an Inspection Standpoint
- Concrete and Reinforcing Steel Observations
- Structural Steel Observations
- Soils and Building Code
- The Remodeling Conundrum: When the Order Matters
- Ventilation: The Many Sides of Air
- 2018 IBC and IFC Fire Protection Systems
- Legal Aspects of Code Administration
- Building Inspector Roundtable

2019: Environmental Issues, 3hr course

2016: 2012 IBC Performing Nonstructural Plan Review, 24 CEUs

2015: Attended 59th Annual Institute for Building Officials, 18 hours CEUs

- The "State of the State"- Construction Regulation
- Update to MN Rule 1322 "Residential Energy"
- MN Amendments for 2012 IEBC
- MN Amendments for 2012 IRC
- Residential Masonry & Concrete
- Residential Deck Connections
- Legal Perspectives in Code Enforcement
- Tenant/Landlord Law Overview for Inspectors
- Application of International Mechanical Code to Existing Housing

2015: 2012 IBC Inspection of Fire-Resistant Rated Walls, Floors, Ceilings & Roofs, 7 CEUs

2015: Basic Techniques of Install of Vinyl Siding, 5 CEUs

2015: Lead Safety for Renovation, Repair & Painting, 8 CEUs

2013: Attended 57th Annual Institute for Building Officials, 24 hours CEUs

- 2012 IRC Fundamentals- Building Provisions
- IRC Changes 2006-2012
- Application of the 2012 IEBC

2012 IRC Wall Bracing

2010: Attended 55th Annual Institute for Building Officials

First Party Claims Conference

2017 Attendee

- Problems and Solutions Under Law and Ordinance and Code Upgrade Coverage- Finley Harckham, Esq., Anderson Kill Loss Advisors
- Hail Mechanics, Opacity, and Why Small Hail Can Do Big Damage- Matt Phelps, P.E., APEC, LLC
- New Developments in the Engineering Investigation of Wind/Hurricane Damage- Neil Hall, Ph.D., P.E., AIA, Neil Hall & Associates
- The Million Dollar Question ... Literally: How to Determine the Date of Loss for Hail and Wind Claims- Howard Altschule, CCM, Forensic Weather Consultants, LLC

2015 Attendee

- Appraisals-Strategies and Techniques to Effectively Manage Process
- Judging the Validity and Efficacy of Engineering and other Expert Reports
- Little Known Technologies in Residential & Commercial Roofs
- Builders Risk and Construction Defects-Case Studies

2014 Presenter: Fire Investigation from the Perspective of the Adjuster, Insured and Investigator

Special Training

January 1993

Marvin Windows, Warroad Plant, 30 hours, factory training, including:

- Removable vs. factory applied flanges
- Sealant at flanges
- Need for drip caps
- Introduction of SDL glazing
- Change in coating process for factory finishes
- Metal frame assembly installation over wood assembly
- Authentic divided lite limitation with glazing panels
- Use of commercial products in historic residential structures
- HPC approvals for Marvin Alpine
- Installation techniques including flashing gridlines
- First look at French casement prototypes

Andersen Renewal Windows, Joint Venture

1997-99

- Liaison to Andersen Partnership Council (group of 20 contractor advisors)
- Set up 20-person installation team to install first windows developed in pilot program
- Direct consultant with Aspen Technologies and Andersen Design Team
- Recommended modifications to the product including flange system
- Glazing pockets and type of seal at glazing panel
- Drip cap design and integration
- Weep system design

- Installation techniques and requirements
 - Installation costs by unit, developed one of three tracking systems.
 - Consulted on advertising and marketing of product
 - Received over 200 hours in training from Andersen on fenestration products, including design installation, service, sales, marketing and distribution
 - Assisted Renewal in setting up in home sales and show room sales program
 - Trained first sets of Renewal sales force by personally going with them on hundreds of initial calls to see if the product would work in the proposed applications
- Association of Wall and Ceilings International (AWCI) Conference** 2001
- Mold Abatement and Diagnostic Techniques class
 - EFIS installation techniques and establishing drainage plains
 - Barrier Wall Design vs. Drain Plane Design
- Remodelers Show, Indianapolis, Indiana** 2002
- Pella Window installation training and techniques using Tyvek and new Pella tape system seminar
 - Mold seminar taught by Dr. Joe Listerbeck
 - Seminar on comparison of OSB, Dens Glass Gold and Plywood permeability
- Architectural Testing Window Performance Seminar** 2003
- Testing and interpreting testing results of fenestrations using AAMA and ASTM criteria
 - Using ASTM E-2128 as performance criteria for evaluating water intrusion
 - Class on glazing panels and U-values
- University of Wisconsin** 2007
- Advanced Project Management Techniques and Principals Level II – Masters Level
- Additional Seminars**
- ICC Residential Building Code Inspector 2008
 - Overview MN Rules Chapters: 1323, 1301 & 1322 2009
 - ICC Residential Property Maintenance Inspector 2009
 - Performing IBC Commercial Inspections, 1-day 2010
 - UL Fire Research Light Weight Instruction, 1-day 2010
 - Fire Station Flashing, 1-day 2010
 - Fire Rated Assemblies, 1-day 2010
 - ICC – IRC Townhome Requirements, 1-day 2010
 - Building Science and Building Enclosures, 2.5 days 2010, 2011
 - IRC & IBC, 2-days 2012
 - 2012 International Existing Building Code, 1-day 2013
 - Brace Wall Panel Design, 1-day 2013
 - 2012 IBC Transitions From 2006 2013
- Industry Awards**
- Remodeling Magazine “Big 50” Awarded as one of Top 50 contractors in the nation 1990
 - First contractor in Minnesota to pass the certified remodelers test and received the Certified Remodelers Designation 1990
 - Outstanding leadership award, NARI, Minnesota chapter 1989-96
 - Leadership awarded each year by the Builders Association of Minnesota 1994-97
 - Founded Minneapolis/St. Paul Home Tour 1994
 - Criteria writer for National Quality Awards sponsored by NAHB, Washington, DC 1995
 - One of four judges for National Quality Awards for NAHB 1996-98

Professional Organization Membership

- President, NARI, Minnesota Chapter 1989-91
- Presented first Uniform Model Contractor Licensing Bill for Remodelers to Builders Association of Minnesota and State legislature 1990
- Appointed to State Board Builders Association of Minnesota 1996-98
- Member of Andersen Window's Partnership Council 1996-98
- Assisted in development of Renewal window by Andersen 1997-99
- Member of American Society of Testing and Materials (ASTM) 2004-06
- International Code Council (ICC) Corporate membership 2007-18
- Better Business Bureau 2004-16
- RCI 2013-14

Department of Insurance Continuing Education Instructor

2014-18

Mr. Irmiter has been approved to teach continuing education classes for the Insurance industry in the following states:

- California
- Colorado
- Florida
- Georgia
- Minnesota
- New York State
- Pennsylvania
- Virginia

No publications published

Testimonies, Depositions & Appraisals

Testimony at District Court Trials:

1. Interlachen Property Owners Association, Inc., v American Family Mutual Insurance (2013) Hennepin County, MN Court File No. 27-CV-11-12855, Judge Bruce A. Peterson. Attorney Brenda Sauro (Sauro & Bergstrom).
2. Interlachen Property Owners Association, Inc., v Kuepers Construction, Inc. (2013) Crow Wing County, MN Court File No. 18-CV-11-5061, Judge Kristine R. DeMay. Attorney Jason Tarasek (Hammargren & Meyer).
3. 77th Street, LLC v American Family Mutual Insurance (2014) U.S. District Court of Arizona, Case No. CV 12-01910-PHX-SLG, Judge Sharon L. Gleason. Attorneys Michael Doyle & Kevin Wein (Doyle Raizner).
4. Park Monaco Association v Myra Lansky, Denver County District Court, Case No. 2012CV2370, Judge Morris Hoffman, Attorneys Milo Miller & Steven Kabler (Miller Kabler), May 18, 2015.
5. Joseph and Jennifer Roach v County of Becker v Luxury Landscaping & Lawn Care LLP, County of Becker, MN Court File No. 03-C5-05-667, Judge Jay D. Carlson. Attorney James P. Peters (James P. Peters PLLC), November 16, 2015
6. King's Cove Marina, LLC v Zinniel Electric Company, and Schwickerts Tecta America, LLC. (2016) County of Dakota, MN Court File No. 19-HA-CV-14-2282. Attorney Stephen P. Watters (Watters Law Office), May 5, 2016
7. David and Marjorie Anderson v Apex Roofing Consultants, LLC (2016) Jefferson County, CO Case No.2016-CV-30422. Attorney Eric Schunk (Schunk & Associates).

8. Manchester Place HOA, Inc. v Owners Insurance Company, District Court of Colorado, Case No.14-cv-03226-REB-STV. Attorneys Daniel Barton, Robert Green & Wayne Collins (Robert Green Law Firm & Barton Law Firm), April 26, 2017
9. Norman Jones v State Farm, District Court of Tarrant County, Texas, Cause No. 017-279433-15. Attorneys Will Alan & Alex Nava (Allan Nava & Glander Law Firm), September 27, 2017
10. Arturo Salinas v USAA Texas Lloyd's Company, District Court, Hidalgo County, Cause No. C-1071-14-H. Attorneys Will Alan & Alex Nava (Allan Nava & Glander Law Firm), January 29, 2018
11. Joseph Garry v. Central Minnesota Renovations, Inc., Damage Assessment Division, Inc., and Andersen Corporation (2018) Dakota County, 19HA-CV-17-679. Attorneys Michael Sacchet & Mathew Korte (Ciresi Conlin), June 6, 2018
12. King's Cove Marina, LLC v Roehl Construction Company, Washington County, Court File No 82-CV-14-527. Attorney Stephen P. Watters (Watters Law Office), June 12, 2018
13. United States Roller Works, Inc v State Auto Property & Casualty Insurance, District of Tennessee, Nashville Division, No. 3:16-cv-2827. Attorney Brandon McWherter & Clint Scott (Gilbert Russell McWherter Scott Bobbitt), September 25, 2018

Testimony at Federal Court Trials:

No trials within last 4 years

First Party Appraisals & Expert Testimony:

1. Walnut Creek matter, OH, umpire 2014
2. Hawthorne Glen matter, OH, umpire 2014
3. Hoffman matter, IA, appraiser for Plaintiff 2014
4. Cauba matter, TX, appraiser for Plaintiff 2014
5. Ayala matter, TX, appraiser for Plaintiff 2014
6. Beaza matter, TX, appraiser for Plaintiff 2014
7. Cavazos matter, TX, appraiser for Plaintiff 2014
8. Conde matter, TX, appraiser for Plaintiff 2014
9. Escamilla matter, TX, appraiser for Plaintiff 2014
10. Espinoza, Sergio matter, TX, appraiser for Plaintiff 2014
11. Garza matter, TX, appraiser for Plaintiff 2014
12. Rodriguez, Ricardo matter, TX, appraiser for Plaintiff 2014
13. Villanueva/Lopez matter, TX, appraiser for Plaintiff 2014
14. Espinoza, Jose matter, TX, appraiser for Plaintiff 2014
15. Hernandez matter, TX, appraiser for Plaintiff 2014
16. Montalvo matter, TX, appraiser for Plaintiff 2014
17. Ramos matter, TX, appraiser for Plaintiff 2014
18. Casas matter, TX, appraiser for Plaintiff 2014
19. Castillo matter, TX, appraiser for Plaintiff 2014
20. Garcia, Ernesto matter, TX, appraiser for Plaintiff 2014
21. Garcia, Mario matter, TX, appraiser for Plaintiff 2014
22. Gonzalez, Raul matter, TX, appraiser for Plaintiff 2014
23. Marquez matter, TX, appraiser for Plaintiff 2014
24. Olvera matter, TX, appraiser for Plaintiff 2014
25. Pinon matter, TX, appraiser for Plaintiff 2014
26. Resendez matter, TX, appraiser for Plaintiff 2014
27. Lucio matter, TX, appraiser for Plaintiff 2014
28. Pope matter, MN, appraiser for Plaintiff 2014

29. Mendoza matter, TX, appraiser for Plaintiff 2014
30. Garcia, Isquel matter, TX, appraiser for Plaintiff 2014
31. Fogarty matter, MN, appraiser for Plaintiff 2014
32. Perez matter, TX, appraiser for Plaintiff 2014
33. Dominick matter, MO, appraiser for Plaintiff 2014
34. Colbert matter, KS, appraiser for Plaintiff
35. Windom matter, MO, umpire 2014
36. Haldeman matter, WI, appraiser for Plaintiff 2014
37. Herll matter, MN, expert testimony 2014
38. Fontana matter, MN, expert arbitration 2014
39. Sabri matter, MN, expert testimony 2014
40. Simons, 2 matters, TX, appraiser for Plaintiff 2014
41. Gonzalez, Rosendo matter, TX, appraiser for Plaintiff 2014
42. Zamarripa matter, TX, appraiser for Plaintiff 2014
43. Vasquez matter, TX, appraiser for Plaintiff 2014
44. Villas at Boulder Ridge matter, IL, appraiser for Plaintiff 2015
45. Dawson Mill Village matter, IL, appraiser for Plaintiff 2015
46. Wicklow Village Townhomes matter, IL, appraiser for Plaintiff 2015
47. Westridge Homeowners Association matter, IA, appraiser for Plaintiff 2015
48. Orchard Pointe matter, MN, appraiser for Plaintiff 2015
49. Mainali matter, TX, appraiser for Plaintiff 2015
50. Northstar Condo Association matter, IL, appraiser for Plaintiff 2015
51. Shorely Wood matter, IL, appraiser for Plaintiff 2015
52. Colonnade matter, CO, appraiser for Plaintiff 2015
53. American Star Inn- Munday matter, TX, appraiser for Plaintiff 2015
54. Travel Inn- Abilene matter, TX, appraiser for Plaintiff 2015
55. JD&B Midtown matter, ATL, umpire 2015
56. Holiday Inn Express- Coon Rapids matter, MN, appraiser for Plaintiff 2015
57. Jonah Investments/Bailey's Furniture matter, TX, appraiser for Plaintiff 2015
58. Heritage Place matter, CO, appraiser for Plaintiff 2015
59. Long Birch Lodge matter, MN, appraiser for Plaintiff 2015
60. Patrick's Fine Dining matter, MN, appraiser for Plaintiff 2015
61. Colonial Patriot HOA matter, MN, appraiser for Plaintiff 2015
62. First Evangelical Free Church matter, IA, appraiser for Plaintiff 2015
63. Delfs, Henry matter, IA, appraiser for Plaintiff 2015
64. Woodland Trail Condominium matter, IA, appraiser for Plaintiff 2015
65. Karathansas, George matter, TN, appraiser for Plaintiff 2015
66. Travel Inn- Snyder matter, TX, appraiser for Plaintiff 2015
67. Family Dollar- Raeouf, Mohammad matter, CO, appraiser for Plaintiff 2015
68. Wak Inc.- Marrakech Café matter, CO, appraiser for Plaintiff 2015
69. South Texas Education Technologies matter, TX, appraiser for Plaintiff 2015
70. La Quinta-Stephenville matter, TX, appraiser for Plaintiff 2015
71. Holiday Inn Express- Eastland matter, TX, appraiser for Plaintiff 2015
72. American Star Inn- Throckmorton matter, TX, appraiser for Plaintiff 2015
73. Poremba, Scott matter, IL, appraiser for Plaintiff 2015
74. The Willows of Vernon Hills matter, IL appraiser for Plaintiff 2015
75. Deer Run Condominium matter, IL, appraiser for Plaintiff 2015
76. Neudearborn Station matter, IL, appraiser for Plaintiff 2015
77. Motel 6-Tyler matter, TX, appraiser for Plaintiff 2016
78. Pebblewood at Pinecliff HOA matter, CO, appraiser for Plaintiff 2016

79. The Greens of Irish Prairie matter, IL, appraiser for Plaintiff 2016
80. Irish Prairie Recreation Center matter, IL, appraiser for Plaintiff 2016
81. Olde Schaumburg Row Houses matter, IL, appraiser for Plaintiff 2016
82. Olde Schaumburg Condominium matter, IL, appraiser for Plaintiff 2016
83. Villas of Gleneagle Farms HOA matter, IL, appraiser for Plaintiff 2016
84. Comfort Inn- Columbus matter, TX, appraiser for Plaintiff 2016
85. Days Inn- Ft Worth matter, TX, appraiser for Plaintiff 2016
86. Microtel- Ft Worth matter, TX, appraiser for Plaintiff 2016
87. Williamstown Apartments matter, TX, appraiser for Plaintiff 2016
88. Scholar's Walk Townhomes matter, CO, appraiser for Plaintiff 2016
89. Weaver, Sheryl matter, MN, appraiser for Plaintiff 2016
90. Delux Inn Motel matter, TX, appraiser for Plaintiff 2016
91. Buttar Family (3 matters), TX, appraiser for Plaintiff 2016
92. Greenview Inn matter, TX, appraiser for Plaintiff 2016
93. Valley View Budget matter, TX, appraiser for Plaintiff 2016
94. Masters, Ketan matter, TX, appraiser for Plaintiff 2016
95. Burleson Inn matter, TX, appraiser for Plaintiff 2016
96. Wyndham Plaza matter, TX, appraiser for Plaintiff 2016
97. Gleannloch Farms matter, TX, appraiser for Plaintiff 2016
98. EconoLodge matter, IL, appraiser for Plaintiff 2016
99. Arlington Club Condominium Association matter, IL, appraiser for Plaintiff 2016
100. Kellington matter, MN, appraiser for Plaintiff 2017
101. Historic Lemp Brewery matter, MO, appraiser for Plaintiff 2017
102. Meglio Investments matter, MO, appraiser for Plaintiff 2017
103. Summit Development/Westline Industries matter, MO, appraiser for Plaintiff 2017
104. Runaway Bay matter, IL, appraiser for Plaintiff 2017
105. Hutchins Warehouse matter, TX, appraiser for Plaintiff 2017
106. Scripture Doctors Park matter, TX, appraiser for Plaintiff 2017
107. Manors of Broadmoor matter, MO, appraiser for Plaintiff 2017
108. Silverton Condos matter, MD, appraiser for Plaintiff 2017
109. Armet matter, TX, appraiser for Plaintiff 2017
110. Pinnell Square matter, TX, appraiser for Plaintiff 2017
111. Bayview Tower matter, TX, appraiser for Plaintiff 2018
112. AMP Manufacturing matter, DE, appraiser for Plaintiff 2018
113. Salty Sway matter, Virgin Islands, appraiser for Plaintiff 2018
114. Oceanus Management matter, Virgin Islands, appraiser for Plaintiff 2018
115. Glen Oaks Townhomes matter, IA, appraiser for Plaintiff 2018
116. White Transfer & Storage matter, IA, appraiser for Plaintiff 2018
117. Robstown Enterprises- Best Western Tropic Inn matter, TX, appraiser for Plaintiff 2018
118. Palak Investments- Hampton Inn matter, TX, appraiser for Plaintiff 2018
119. Gloff Motors Inc matter, TX, appraiser for Plaintiff 2018
120. South Texas Hindu Society matter, TX, appraiser for Plaintiff 2018
121. Tamkas Management- Plantation Suites matter, TX, appraiser for Plaintiff 2018
122. Terrum Investments matters (2 Properties), TX, appraiser for Plaintiff 2018
123. Cedar Park Townhome matter, TX, appraiser for Plaintiff 2018
124. Lidhar Brothers- Airport Inn matter, TX, appraiser for Plaintiff 2018

Depositions and/or Affidavits Filed in Courts:

1. New England Compounding Pharmacy, Inc., Products Liability Litigation, State of Massachusetts. Court File No. 1:13-md-02419-FDS
2. Frank and Beth Insana v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2011-018143, January 6, 2014
3. Rudolf and Elva Lehman v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2011-017999, January 6, 2014
4. Henry Nguyen v American Family Mutual Insurance, District Court, District of Arizona, Case No. CV12-2103-PHX-DGC, January 6, 2014
5. Terry and Karen Vander Vulcht v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2012-010410, January 17, 2014
6. David and Pamela Van Winkle v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2011-018329, January 17, 2014
7. Linda Walters v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2011-018392, January 17, 2014
8. Francisco and Gloria Magana v State Farm Fire and Casualty, Superior Court, State of Arizona, Maricopa County, Case No. CV2012-05132, January 21, 2014
9. Casa Del Pueblo HOA v American Family Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2012-004465, February 20, 2014
10. Healthspace Regions Lancaster, LLC v Hanover Lloyd's Insurance, District Court of Dallas County, Texas, Case No. DC-13-03877-L, February 26, 2014
11. Diane and Jesse Salazar v State Farm Lloyds, District Court, Southern District of Texas, Case No. 4:13-CV-01904, March 4, 2014
12. Dominion/TM Mian v Lexington Insurance, District Court of Dallas County, Texas Case No. DC-12-13349, March 18, 2014
13. Erika Smith and Gabriel Smith v Country Mutual Insurance, Superior Court, State of Arizona, Maricopa County, Case No. CV2012-014980, April 29, 2014
14. Arlington Southern Hills, LLC v The American Insurance, District Court, Northern District of Texas, Case No. 4:13-CV-676, April 30, 2014
15. Fairways at Tagalong Condominium Association Inc, v Tagalong USA, LLC, Circuit Court, State of Wisconsin, Barron County, Case No. 12-CV-560, July 3, 2014
16. Southgate Townhome Association v Allstate Insurance, Circuit Court, Illinois, Cook County, Case No. 12 L 003185, July 15, 2014
17. Robert Howie & Jaclyn M. Moore v State Farm Lloyds and Jarvis W. Mayes, District Court, Texas, Harris County, Case No. 2013-45419, August 14, 2014
18. Carlos A. Flores Villanueva v State Farm Lloyds and Delfino Mendoza, Jr., District Court, Southern District of Texas, Case No. 7:13-CV-00601, September 17, 2014
19. La-Ben Realty LLC v Valley Forge Insurance, District Court, Northern District of Texas, Case No. 2:14-CV-00057-J, October 3, 2014
20. Avalon Condominium Association, Inc. v Secura Insurance, District Court, District of Colorado, Case No. 14-cv-00200-CMA-KMT, January 27, 2015
21. Harvey Property Management Co. v Travelers Indemnity, District Court, District of Arizona, Case No. 2:12-CV-05136-SLG, March 4, 2015
22. Patricia Schniedwind v American Family Mutual Insurance, District Court, District of Colorado, Civil Action No. 14-CV-01734-PAB-NYW, June 11, 2015
23. Shaun & Debra Oppenheimer v Allstate Fire and Casualty Insurance, District Court, District of El Paso, Case No. 2014cv31834, June 23, 2015

24. Jesus & Joanne Borrego v American Family Mutual Insurance, District Court, District of Colorado, Civil Action No. 14-cv-01732-WYD-MJW, June 24, 2015
25. The Fairway 16 Heatheridge Association v. American Family Mutual Insurance, District Court, District of Colorado, Civil Action No. 14-CV-02717-WJM-NYW, August 28, 2015
26. Charles & Laurie Leggett v State Farm Fire and Casualty Company, District Court, District of Colorado, Civil Action No. 1:14-CV-02269, November 3, 2015
27. Mark Marcucci v Great Northern Insurance Company, Eighteenth Judicial Circuit Court, County of Dupage, Illinois, 2014L000372, November 5, 2015
28. Risk Services Corp et. al. v Lexington Insurance Company, District Court, Northern District of Georgia, Atlanta Division, Civil Action File No. 1:14-cv-03322-TWT, December 18, 2015
29. Pear Ridge Creek Apartments v AIX Specialty Insurance Company et al, District Court, Dallas County, Texas, No. DC-14-0073, January 19, 2016
30. El Nacional de Oklahoma, Inc. v Travelers Casualty Insurance, District Court, Western District of Oklahoma, Case No. CIV-14-728-D, January 20, 2016
31. ADRE Country Square LLC v Westchester Surplus Lines Insurance Company, District Court, District of Colorado, Case No. 1:15-cv-00184-PAB-KMT, January 28, 2016
32. Gateway Townhomes Association, Inc v Travelers Indemnity Company, District Court, District of Colorado, Civil Action No. 1:15-cv-000395-NYW, February 5, 2016
33. Linda Patten v Allstate Insurance Company, Circuit Court, Jasper County, Missouri, Case No. 14AO-CC00065, April 20, 2016
34. OHM Properties LLC v American Family Mutual Insurance Company, Circuit Court of St. Louis, Missouri, Case No. 14SL-CC03296, July 12, 2016
35. Arthur Rawlings and American Litho Color, Inc. v American Economy Insurance Company, District Court, Dallas County, Cause No. DC-15-14509, August 31, 2016
36. Hartford Fire Insurance Company v Nationwide Magazine and Book Distributors, Inc., District Court, Northern District of Indiana, No. 3:15-cv-00265-RL-CAN, September 14, 2016
37. West Bend Mutual Insurance Company v West James Courts, Inc., Circuit Court of St Charles County, Missouri, Case No. 1511-CC00028, September 27, 2016
38. Norman & Toylan Jones v State Farm Lloyds, District Court of Tarrant County, Texas, Cause No. 017-279433-15, October 7 & 25, 2016
39. Manchester Place HOA, Inc. v Owners Insurance Company, District Court, District of Colorado, Civil Action No. 1:14-cv-03226-REB-KLM, November 29, 2016
40. The Box Factory, Inc and CHJ Leasing, LLC v Verlan Fire Insurance Company, District Court, District of Texas, Civil Action No. 4:15-CV-861-A, December 5, 2016
41. Wilshire Manor Apartments v State Farm Insurance Company, District Court, District of California, Civil Action No. 2:16-cv-04363-R-GJS, December 6, 2016
42. Copper Ridge Owner's Association v Philadelphia Indemnity Insurance Company, District Court, Western District of North Carolina, Case No. 3:16-cv-305, April 5, 2017
43. WWMS, Inc. v Ohio Security Insurance Company, District Court, Western District of Tennessee, Civil Action No. 1:16-cv-01113, April 6, 2017
44. Northend Investors LLC v Southern Trust Insurance Company, District Court, Western District of Tennessee, No. 1:16-cv-01137 JDB-egb, April 7, 2017

45. Joe Kaniki v Texas Fair Plan Association, District Court, Tarrant County, Texas, Cause No. 342-281451-15, May 16, 2017
46. Donald Hudgins Jr. and Baker Development Company v The Netherlands Insurance Company, District Court, Tarrant County, Texas, Cause No.067-281402-15, July 20, 2017
47. Greater Bethesda Missionary Baptist Church v Philadelphia Indemnity Insurance Company, District Court, Northern District of Illinois, Case No. 1:16-CV-3351, July 27, 2017
48. Grace & Mercy Missionary Baptist Church v Texas Windstorm Insurance Association, District, Court, Galveston County, Texas, Cause No. 16-CV-0831, August 10, 2017
49. Jana Food Service v Nationwide Insurance Company, District Court, Fort Worth Division, Texas, Civil Action No. 4:16-cv-864-A, September 7, 2017
50. JNH Holding v Nationwide Property and Casualty Insurance Company, District Court, Sherman Division, Texas, Civil Action No. 4:16-cv-866-ALM, September 7, 2017
51. Wak Inc, Amal Inc, Marrakech Café v Ohio Security Insurance Company, District Court of Colorado, Civil Action No. 1:16-cv-01191-MSK-MJW, October 24, 2017
52. Welcome Properties 201, LLC v National Fire & Marine Insurance Company, District Court, District of New Mexico, No. 16-cv-01301 JCH-SMV, November 8, 2017
53. AM Royal, Inc. v Milwaukee Casualty Insurance Company, District Court of Dallas County, Cause No. DC-17-01769, November 13, 2017
54. Dena Davis v Allstate Vehicle & Property Insurance Company, District Court, Tarrant County, Cause No. 342-289965-17, November 15, 2017
55. Arturo Salinas v USAA Texas Lloyd's Company, District Court, Hidalgo County, Cause No. C-1071-14-H, December 18, 2017
56. Royal Architectural Products v Acadia Insurance Company, District Court, Potter County. Cause No. 104713-B, January 10, 2018
57. Cambridge Condominium v Peleus Insurance Company, District Court of Dallas County, Cause No. DC-17-04060, January 12, 2018
58. TBC-JR-LR, JV v Allied Property and Casualty Insurance Company, District of Texas, Fort Worth Division, Civil Action No. 4:17-CV-131-Y, February 15, 2018
59. United States Roller Works v State Auto Property & Casualty Insurance Company, District of Tennessee, at Nashville, No. 3:16-cv-02827, February 28, 2018
60. Sreeram Natarajan and Aparna Natarajan, v Brian J. McDonald and Jennifer A. Rodriguez, Circuit Court for The Eighteenth Judicial Circuit, DuPage County, Illinois, Case No. 2017 CH 273, March 15, 2018
61. Andrew Chong & Hongeng LTD v Westchester Surplus Lines Insurance Company, District Court for 55th Judicial District, Harris County, Texas, Cause No. 2016-79600, March 21, 2018
62. Fraser Crossings-Founders Pointe Condominium Association v. Intrawest/Winter Park Development Corporation, Judicial Arbiter Group, Englewood, Colorado, Case No. 2017-0633A, April 11, 2018
63. Samuel Garcia, D/B/A Calvary Memorial v Travelers Casualty Insurance Company, District Court of New Mexico, No. 2:17-cv-00423-JCH-KRS, April 23, 2018
64. Central Baptist Church of Albany Georgia, Inc v Church Mutual Insurance Company, District Court of Albany, Civil Action No. 1:16 cv00231-LJA, May 7, 2018

65. Forest Ridge Homeowners Association v Greater New York Mutual Insurance Company, Northern District Court of Illinois, Eastern Division, Case No. 1:17-cv-4193, May 17, 2018
66. Iglesia El Jordan v Church Mutual Insurance Company, District Court of Western District of Texas, San Antonio Division, Civil Action No. 5:17-cv-01077-FB, May 22, 2018
67. Mohammad Raeouf v Travelers Property Casualty Company of America, District Court of Colorado, Civil Action No. 16-cv-01974-CMA-MEH, June 11, 2018
68. Lakes of Bent Tree Condominium Association v Peleus Insurance Company, Strata Claims Management & Engle Martin & Associates, District Court of Dallas County Texas, Cause No. DC-17-10965, June 15, 2018
69. Miller Creek Holdings, LLC v Landmark American Insurance Company, District Court of Dallas County Texas, Cause No. DC-17-04796, August 20, 2018
70. HIE of St. Louis Airport, LLC v The Cincinnati Insurance Company, Circuit Court of St. Louis County MO, Cause No. 17SL-CC02582, February 27, 2019
71. Taslid Interests, Inc and Katy Motels, Inc dba Memorial Inn & Suites v Arch Specialty Insurance Company, District Court of Southern District of Texas, Houston Division, Case No. 4:18-cv-1692, April 1, 2019
72. By the Sea Council of Co-Owners Inc. v Texas Windstorm Insurance Association, District Court of Galveston County Texas, Cause No.18-CV-0529, April 3, 2019



Forensic Building Science, Inc.

DEPOSITION, TRIAL & EXPERT WITNESS FEE SCHEDULE

as of January 1, 2019

Tom Irmiter

Half day: \$2,000

Full day: \$3,500

Site visit for deposition preparation: \$400/hr plus travel time (port-to-port), airfare, lodging, car rental, cab fare, parking, meals and equipment rental

Rate of compensation to be paid for the preparation and testimony is \$400 per hour plus expenses (travel time (port-to-port), airfare, lodging, car rental, cab fare, parking, and meals)

All Field Consultants

Half day: \$1,000

Full day: \$1,800

Site visit for deposition preparation: \$175/hr plus travel time (port-to-port), airfare, lodging, car rental, cab fare, parking, meals and equipment rental

Rate of compensation to be paid for the preparation and testimony is \$175 per hour plus expenses (travel time (port-to-port), airfare, lodging, car rental, cab fare, parking, and meals)

NOTE: All fees must be paid in full prior to the deposition or the deponent will not be deposed and all fees subject to change without notice.

2168 Juliet Ave, St. Paul, Minnesota 55105

T: 651.222.6509

www.forensicbuildingscience.com



Forensic Building Science, Inc.

Storm Damage Report

for

Knights Inn
1121 9th Avenue SW
Bessemer, AL 35023



Brian Craig Johnson, P.E.
Licensed Professional Engineer
32517

Forensic Building Science, Inc.

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Alabama Certificate of Authority 4389

Expires: January 31, 2016

Forensic Building Science, Inc.

595 Selby Avenue

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Client:

Howarth Group

Project Address:

Knights Inn

1121 9th Avenue SW

Bessemer, AL 35023

Jefferson County

Insurance Carrier: Chubb Custom Insurance Company, Policy #: 99783420-00

Insurance Claim #: WKFC-5689A9

FIELD REPORT FOR INITIAL STORM DAMAGE INVESTIGATION

1.0 Background Information:

1.1 Forensic Building Science, Inc. (FBS) was asked to provide an inspection of the roofs of the above-mentioned property to ascertain the extent of damage caused by tornadic winds which was reported to have occurred on April 28, 2014.

1.1.1 Reference information on storm event (tornados ranging in scale from EF1-EF2):

- Details on EF2 tornado with 120 mph winds
<http://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=523012>
- Details on EF1 tornado with 105 mph winds 3 miles to the NW
<http://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=523004>
- Details on EF0 tornado 10 miles to the west
<http://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=522988>
- Local news story
<http://www.kptv.com/story/25369544/9-deaths-reported-as-fast-moving-tornadoes-rattle-the-south>

Storm Event Narrative from NOAA report #523012:

"The tornado touched down near Academy Drive and Southgate Lane in Bessemer and traveled to the northeast, snapping and uprooting dozens of trees along its path. In addition, dozens of homes sustained damage from downed trees. The tornado intensified with winds of 120 mph as it neared the Frank House Municipal Golf Course where the clubhouse was destroyed. The tornado continued on its northeast path, crossing the golf course, snapping and uprooting

hundreds of trees. Several homes and an apartment complex sustained significant roof damage around Memorial Drive. The tornado continued to the northeast as it paralleled 4th Avenue North. The tornado took a slight turn to the east as it crossed Alabama Highway 150, causing minor damage to a home and small restaurant. Hundreds of trees were uprooted through Bessemer, before the tornado lifted near the intersection of Dartmouth Avenue and 31st Street South."

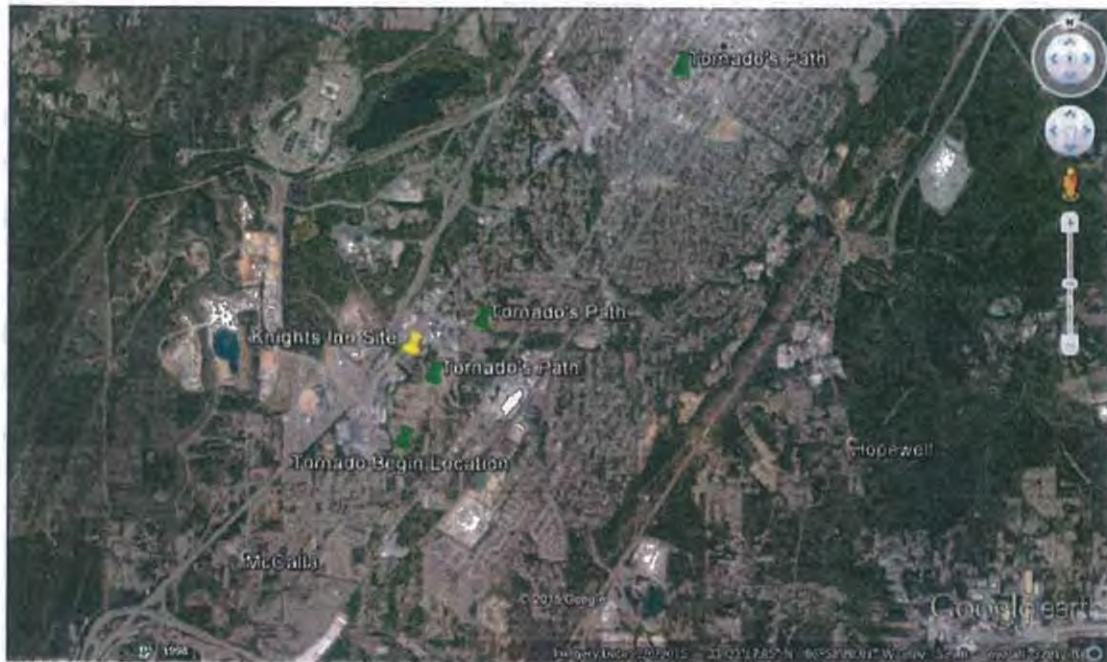


Image depicts the tornado's path as described in the narrative from NOAA Report #523012.



Blue pin represents location of the property (0.15 miles from the tornado).

1.2 Satellite overview



Google Earth image with buildings numbered, dated December 12, 2013.

Forensic Building Science visited the site and took photos to document damaged locations. These photos are attached to this report.

- 1.3 Forensic Building Science personnel present at this inspection:
 - Jim Irmiter, Field Investigator (July 7 - 9, 2015).
 - Adam Piero, Field Investigator (July 7 - 9, 2015).
- 1.4 The following documents have been received:
 - Chubb Custom Insurance Policy.
 - Capture Citizen Access info on Building 1-3.
 - Realtrac info on Knights Inn property.
 - York SLA Estimate (\$34,597.92) dated April 2, 2015
 - Google Maps imagery of property.
- 1.5 According to Jefferson County Capture Citizen Access, Building 1 was constructed in 1974 [1969], and Buildings 2 and 3 in 1974 [1972] and all three buildings total 78,310 square feet.
- 1.6 The property consists of three low rise commercial buildings. One single-story building serves as a lobby, ballroom and office facilities for the hotel. The remaining structures are two-story buildings and house hotel guests (R-1 occupancy in current building codes).
- 1.7 Exterior wall finishes consist of the following:
 - Brick on masonry.
 - Stucco on lath.
- 1.8 At the time of our inspection portions of EPDM roof had been temporarily repaired with patches and tarps (see section 2.2.2 of this report).
- 1.9 The following additional documents were used for reference:
 - 2009 Building Code of Jefferson County, Alabama. (See Ordinance 1800)
 - 2009 International Building Code.
 - ANSI/ASHRAE/IESNA Standard 90.1-2007 Energy Standard for Buildings Except Low-Rise Residential.
 - Photographs and thermal imaging taken by Forensic Building Science.
 - Haag Certified Roof Inspector Program – Commercial edition – Course Workbook.
 - Construction-Generated Moisture and Its Effect On Roofing Systems, Single Ply Roofing Industry (SPRI) Technical Report, August 2008.
 - Assessing water damage to gypsum board, GA 231-06, Gypsum Association.
 - Relationship between Moisture Content and Mechanical Properties of Gypsum Sheathing–Phase 2 Research." McGowan, *11th Canadian Conference on Building Science and Technology*, held at Banff, Alberta. 2007.
 - ESR 1463, Carlisle EPDM, PVC, and TPO single-ply roofing membranes, Carlisle Syntec, reissued July 2014.

- Attaching Metal Decking, Spoto, Yantz, Criste, Modern Steel Construction, March 2010.
- ASTM D4637-2010 Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane.
- Arc-Puddle Welds and Weld Washers for Attachments in Steel Deck, Luttrell, Steel Deck Institute, reissued Jan 17, 2007.
- Deck Damage and Penetrations, Heagler, R, Steel Deck Institute, revised 2000.
- Designing with Vulcraft Steel Joists, Joist Girders, and Roof Deck, Fisher, West, and Van De Pas, Nucor Corporation, 2nd edition, 2002.
- Design of Fire-Resistive Assemblies with Steel Joists, Schultz, Modern Steel Construction, April 2003.
- Design Of Fire Resistive Assemblies With Steel Joists, Technical Digest No. 10, Steel Joist Institute, 2003

1.10 **Inspection notes:**



Google Earth, Imagery Date 12/17/2013 (before storm), approx. 2,600 ft radius.



Google Earth Imagery Date 2/6/2015 – large areas of trees to east and south gone.

- Area is surrounded by open space and sparse low-rise commercial buildings which is inconsistent with the definition of Exposure B in ASCE 7, Exposure C applies.

Surface Roughness B: Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.

6.5.6.3 Exposure Categories

Exposure B: Exposure B shall apply where the ground surface roughness condition, as defined by Surface Roughness B, prevails in the upwind direction for a distance of at least 2,600 ft (792 m) or 20 times the height of the building, whichever is greater.

- Roof deck is corrugated metal (e.g. 'B deck' or similar). Polynesian roof substrate is unknown.
- Roofing type: Raised rib metal panels. Unballasted EPDM.
- Metal roof pitch: not measured.
- EPDM roof pitch: low-slope.
- Roof Fastening: **Surface driven screws**
- Observed damage on roofs of all buildings. Damage included bent, buckled, permanently deformed, crimped and peeled roof metal flashings and panels.
- Some peeling of EPDM seams noted.
- Mechanically damaged metal roof panel in at least one location (Building 3).

- Interior water damage beneath the low slope EPDM membrane.
- Small water pools on roof (Note 3.18" (record) rainfall on July 4, 2015.)
- Membrane is not abnormally taut, which would indicate EPDM shrinkage.
- Buildings are not sprinklered.

2.0 Site Observations:

2.1 Main Roofs

- 2.1.1 Design and construction of the buildings are similar in all cases. Some observations are generalized from individual observations of buildings. All three buildings were inspected.
- 2.1.2 The building roofs are EPDM surrounded by a raised rib metal panel Polynesian style roof on all sides.
- 2.1.3 Mechanical damage was observed (see Figures 58-61 AP 07-08-2-15).
- 2.1.4 The building has a central low-slope roof covered with an ethylene propylene diene monomer (EPDM) roofing membrane. There was no manufacturer's marking on the EPDM.
- 2.1.5 While there are no manufacturer's specifications identified for the metal roof panels, installation was consistent with other roofs of this type and design we have inspected. EPDM is marked but does not state manufacturer. Thickness of EPDM is 60 mils, based on the manufacturer mark.
- 2.1.6 The EPDM is unballasted. Distress related to shrinkage (tight membrane) was not observed.
- 2.1.7 There were some areas where the seams had become at least partly unsealed, similar to T-peel where two pieces of membrane overlap and are sealed/joined to each other during installation. Given the water intrusion reported after the event to the interior, there are areas where the seam has been broken completely, finding these areas will best be performed with a reflected ceiling plan showing where water damaged tiles are located. Missing ceiling tiles in areas will complicate this task. Seams in some locations were at least partially intact.
- 2.1.8 These peeled seams are locations are possible sources for the interior water intrusion. However, there are many more locations where interior leaks are occurring other than the areas directly below the partially unsealed seams which run across the roof in lines. There are two possibilities – water entering the seams travels on the metal deck (essentially flat) that carries water up to 45 feet away until a breach is located, or from water entering at hail damaged areas and following a similar path. Seam failure is difficult to trace backwards from water intrusion due to the nature of the construction. Topside water breaching the membrane can enter at any point along the metal deck (typically 36" wide and as

long as practical) where it is attached to the open-web steel joists below due to typical 'burn through' of the field puddle welding used to typically attach these decks (See Sputo, and Luttrell).

2.1.9 Inspection Observations:

2.1.10 Building 1 (lobby, ballroom, office and restrooms). Note: References to all Figures refer to Knights Inn Building 1- Photo Log 07-08-15 & 07-09-15 AP & JDI.

- Missing pieces of flashing on metal roof. (Figures 14 & 15)
- Multiple areas where flashing is bent. (Figures 03 & 08)
- Damaged and distorted metal panels. (Figure 16)
- Signs of crimping of metal flashing. (Figure 19)
- Large areas of main roof tarped. (Figures 29, 30 & 32)
- One A/C unit condensate line leaking and draining on to roof causing large shallow pool of water. (Figure 31)
- Multiple seams partially peeling (T-peel). (Figures 36, 43 & 44)
- Multiple areas with patching and caulking around the seams. (Figures 35, 37)
- Patch with air bubble. (Figure 41)
- Damage track across panel. (Figure 58-60)
- Debris damage (Figure 61).
- Metal pulled over fasteners (Figure 73).
- Previous roof hot mopped to LWIC (Figure 83).

Core Cut #1:



- Located 15' from east wall and 20' from north wall.
- 60 millimeter EPDM single ply membrane. (Figure 46)
- 1/2" of actively wet fiberboard. (Figure 79)
- previous roof membranes left in place, \approx 3 (Figure 82).
- 2" of LWIC.
- Corrugated roof deck.

Core Cut #2:



- Located 16' from west wall and 51' from south wall.
- 60 millimeter EPDM single ply membrane.
- visually $\frac{1}{2}$ " of actively wet fiberboard cover board, saturated (Figure 92).
- previous roof membranes left in place, ≈ 3 (Figure 98).
- Tan cementitious material, visually LWIC, wet (Figure 99).

Lobby observations:

- Water staining on ceiling tiles observed. (Figure 102)
- Missing ceiling tile. (Figure 105)
- Water damaged insulation. (Figure 110)
- Efflorescence and water damage on underside of deck observed. (Figure 112)

Ballroom observations:

- Water damaged carpet. (Figure 116)
- Water damaged ceiling tiles (Figure 117)
- Efflorescence and water staining on underside of deck observed. (Figure 119)
- Missing ceiling tiles and water damaged ceiling tiles. (Figure 122)
- Water damaged "sound deadening" insulation. (Figure 123)

Office observations:

- Water damaged ceiling tiles. (Figure 129)
- Missing ceiling tiles. (Figure 130)

Bathroom observations:

- Men's - Sagging and water damaged ceiling tiles observed. (Figure 135)
- Women's - Water damaged and missing ceiling tiles observed. (Figures 139, 140)
- Women's - Water damaged (discolored) floor tiles observed. (Figure 141)

2.1.11 Building 2 (80 Units): Note: References to all figures refer to Knights Inn Building 2- Photo Log 07-08-15 & 07-09-15 AP & JDI.

- Missing pieces of flashing on metal roof. (Figure 18)
- Loose metal flashing. (Figure 21)
- Multiple areas where flashing is bent or crimped. (Figure 16)

- Shallow pools of water in areas on roof. (Figure 14)
- Multiple seams partially peeling (T-peel). (Figures 54-56)
- Tear in metal flashing observed. (Figure 25 & 27)
- Loose screw at loose flashing. (Figure 32)
- Metal pulled over fasteners (Figure 36).

Core Cut #1:



- Located 8' from south wall and 10' from west wall.
- EPDM with active water (Figure 38).
- 1/2" of saturated fiberboard (Figure 39).
- previous roof membranes left in place, ≈ 3 (Figure 44).
- 2" of wet foam insulation (Figure 44).
- 2" Lightweight insulating concrete (LWIC).
- Corrugated metal roof deck.

Core Cut #2:



- Located 3' from south wall and 10' from west wall.
- Fiberboard peeled off with membrane (Figure 63).
- Fiberboard saturated (Figure 67).
- Previous roof membranes, ≈ 3 (Figure 69).
- 2" wet foam insulation – visually isocyanurate rigid foam board. (Figure 69).
- Wet LWIC substrate (Figure 71).

2.1.12 Building 3 (79 Units): Note: References to all figures refer to Knights Inn Building 3- Photo Log 07-08-15 & 07-09-15 AP & JDI

- Evidence of minor water evaporation zones. (Figure 20)
- Multiple seams partially peeling (T-peel). (Figures 14, 23-26)
- EPDM seam patches. (Figure 16)
- Water pooled near peeled/loose EPDM seam. (Figure 22)
- Crimping of metal flashing. (Figure 30)

Core Cut #1:



- Located 4' from west expansion and 4' from north wall.
- Active water on underside of EPDM (Figure 41).
- 1/2" of saturated and friable fiberboard (Figure 42).
- previous roof membrane, \approx 3 (Figure 49).
- 2" of foam insulation (Figure 45).
- 2" of actively wet LWIC (Figure 48).
- Corrugated metal roof deck.

Core Cut 2:



- Located 3' from the south wall and 10' from the west wall.
- Active water underneath EPDM (Figure 61).
- Saturated fiberboard (Figure 65).
- Wet rigid insulation (Figure 67).
- Base sheet (Figure 68).
- Friable and wet cementitious material (LWIC) (Figures 70-72).
- Corrugated metal deck.

Room 153:

- Room is completely missing ceiling tiles and most of insulation. (Figure 78)
- Water damaged ceiling tiles stored in room. (Figure 84)
- Corrosion on underside of corrugated metal deck. (Figure 81)

Office Observations:

- Missing ceiling tiles. (Figure 89)
- Corrosion on underside of corrugated metal deck. (Figure 91)

Room 254:

- Water damaged ceiling tiles. (Figure 98, 99)
- Efflorescence at metal deck seam (Figure 100).

Laundry Room Observations:

- Organic growth on ceiling grid. (Figure 105)
- Water damaged ceiling tiles observed. (Figures 106, 107)
- Corrosion and efflorescence on underside of corrugated metal deck. (Figure 110)
- Missing ceiling tiles. (Figure 110)
- Water damage and organic growth observed. (Figure 112)

Room 231 Observations:

- Room is missing ceiling tiles. Sound deadening insulation hanging down with exposed kraft faced paper. (Figure 118)

Room 222 Observations:

- Room is missing ceiling tiles and most of insulation. (Figure 120)
- Light corrosion on underside of corrugated metal deck. (Figure 121)

2.2 Causation Statement

- 2.3 Based upon information collected from the physical inspection, review of weather data, reports of interior water intrusion (and their observed locations) following the storm event, and physical roof assessment we have concluded that the metal roof and EPDM roof membrane are wind damaged and must be completely replaced. Various metal appurtenances are damaged and must be replaced.

Finding and fixing each individual failed seam (to be certain, putting an EPDM cover plate over every seam on the entire roof, or using trial and error and waiting several months to repeat the process, etc.) would likely be unsuccessful. It will also trap water inside the wet rigid insulation which was found during roof cores and will destroy the fiberboard (which is in our opinion adhered to the EPDM, turning it into a loose-laid system), and also force the water downward, causing additional interior damage as well as creating an environment for corrosion of the structural metal deck.

- 2.4 Based upon information collected from the physical inspection of the interior, much of the building's interior must be replaced. Replacements include carpeting

(where used), insulation (employed here as sound-deadening), drop down ceiling tile systems and some interior walls.

- 2.5 Based upon a reasonable degree of engineering certainty, it is more likely than not that the observed damage is a result of the subject storm event and due to storm-created openings in both the metal roof and the EPDM roof. On the reported date of loss, there was sufficient wind to cause the above-referenced damage.
- 2.6 Failure to replace the roof at the property will result in additional damage due to water intrusion. Water intrusion is already occurring. Storm-created openings in the EPDM seams particularly have allowed water intrusion to penetrate down into the rest of the roof assembly. This (currently) is an R-1 (Hotel) structure with fiberboard coverboard, rigid insulation and lightweight insulating concrete on metal form / structural deck and open web steel joists with an acoustical tile ceiling.
- 2.7 In our opinion, additional costs to repair will be required to meet the current required code and manufacturer's installation instructions (e.g. tapered insulation due to required slope of currently manufactured EPDM, restoration of fire-rated roof assembly, as the building is not sprinklered. Even if it were sprinklered it is still possible the roof is a fire-rated assembly).
- 2.8 In our opinion, additional costs to repair will be required to meet the current required code or manufacturer's installation instructions.
- 2.9 **Discussion of repair options**
- 2.9.1 The roof exhibits peeled seams, partially unsealed seams, and unsealed seams in various areas. The water damage to the ceilings in the buildings that cannot be fully explained by mere failure of the metal roof caps where the Polynesian/Mansard style roof intersects with the sloped wall for the flat part of the main roof. Water intrusion is coming in through the EPDM membrane.
- 2.9.2 EPDM, when it is damaged, it is exceptionally difficult to find the exact flaw/penetration/breach. It is our opinion the results of roof cuts, extents of interior damage, and thermal scanning indicate that the roof is compromised by small failures in the seams located randomly across the roof (T-peel failure) as a result of tension across the seam due to wind uplift. It is clear that the metal edge securement came off this roof. Particularly of interest is Figure 36, Building 2, and Figure 73, Building 1, where the metal pulled over the fasteners. There is a great deal of water under the EPDM membrane (see roof cores, with wet cover boards, wet rigid insulation, and high water content in the LWIC) that is not inherent to the system (as constructed) or 'wicking up' from below. This is roof water leaking downward and damaging the ceiling.
- 2.9.3 This building does not have sprinklers, as this is an R-1 occupancy under current codes, it is our expectation that in the original construction, this was a fire-rated roof assembly which depends upon the ceiling tile as part of that system. The

metal deck is not sprayed with fire-proofing, the Open Web Steel Joists are not fire-proofed, etc., (See Shultz). When the ceiling tile is removed or the ceiling tile is water-damaged, it must be replaced to restore the property to a pre-loss condition. This replacement tile must be matched to the existing tiles listed as acceptable in the UL fire-rated assembly (or a change to another fire-rated assembly may be entertained with a code review by a licensed architect). Mr. Irmiter and Mr. Johnson are familiar with these requirements and their impact on construction but a licensed architect will be needed to finalize any change to this system as explained here.

- 2.9.4 Assessment always must be based primarily on observations in the field, with secondary consideration to the sparse weather data that typically exists.
- 2.9.5 Given the extent of the interior damage and the amount of water held in the fiberboard and insulation is much larger than would be expected of a couple of wind failed seams, it is our opinion that there are a multitude of breaches spread throughout the area.
- 2.9.6 Given the diffuse and sporadic damage to the roof, it is our opinion that patching is impractical and will not produce a satisfactory result (i.e. a roof that does not leak without multiple call backs.) The water damage to the fiberboard has also reduced adhesion between the membrane and the fiberboard, (no stress plates were observed, indicating that the cover board is adhered to the membrane). Water compromises the adhesion between the EPDM and the cover board (saturation of the fiberboard also destroys its strength), this roof is now more vulnerable to further wind damage in the future (the fully adhered system is gradually becoming a loose-laid unballasted system due to storm-created openings and water damage to the fiberboard).
- 2.9.7 Water damaged fiberboard is present beneath the majority of cuts performed. This material must be removed, it is generally 'counted on' to provide some of the R value of the roof, but the moisture held in the material reduces the value of the insulation. To remove it the most feasible method is cutting apart the membrane. First, if this membrane were undamaged, it would require testing to patch into with like materials. Tie-in or reinstalling roofing will require establishing that the as-is material conforms to the ASTM D4637 requirements for newly manufactured EPDM roofing (i.e. per IBC 104.11, ASTM D4637 for equivalent in performance to new roofing for breaking strength, elongation, tearing strength, low temperature bend, etc. Weather resistance testing per G151 and G155 will 'consume' parts of the roof in attempting to re-establish their validity for reinstallation.). Thus, without testing, new roofing will be required in this area as well. With testing, there will still be some shortage of material.

104.11 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been *approved*. An alternative material, design or method of construction shall be *approved where the building official finds* that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, *fire resistance*, durability and safety.

104.11.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the *building official* shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *building official* shall approve the testing procedures. Tests shall be performed by an *approved agency*. Reports of such tests shall be retained by the *building official* for the period required for retention of public records.

1507.12 Thermoset single-ply roofing. The installation of thermoset single-ply roofing shall comply with the provisions of this section.

1507.12.1 Slope. Thermoset single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

1507.12.2 Material standards. Thermoset single-ply roof coverings shall comply with ASTM D 4637, ASTM D 5019 or CGSB 37-GP-52M.

Source: 2009 International Building Code.

This is a hotel complex, protection of egress and lighting should be provided during construction to protect pedestrians (including employees of the businesses).

Add the following subsections to Section 3403.1 in Chapter 34 Existing Structures in the "2009 Edition of the International Building Code."

3403.1.1 If, within any twelve (12) month period, alterations or repairs costing in excess of fifty (50) percent of the then physical value of the building are made to an existing building, such building shall be made to conform to the requirements of this Code for new buildings.

3403.1.2. If an existing building is damaged by fire or otherwise in excess of fifty (50) percent of its then physical value before such damage is repaired, it shall be made to conform to the requirements of this Code for new buildings.

3403.1.3 If the cost of such alterations or repairs within any twelve (12) month period or the amount of such damage as referred to in 3403.1.2 is more than twenty-five (25) percent but not more than fifty (50) percent of the then physical value of the building, the portions to be altered or repaired shall be made to conform to the requirements of this Code for new buildings to such extent as the Building Official may determine.

3403.1.4 For the purpose of this section, physical value of the building shall be determined by the Building Official.

3403.1.5 If the occupancy of an existing building is changed, the building shall be made to conform to the requirements of this Code for the new occupancy. If the occupancy of only a portion of an existing building is changed and that portion is separated from the remainder as stipulated in Section 706, then only such portion need be made to conform.

3403.1.6 Repairs and alterations, not covered by the preceding paragraphs of this section, restoring a building to its condition previous to damage or deterioration, or altering it in conformity with the provisions of this Code or in such manner as will not extend or increase an existing non-conformity or hazard, may be made with the same kind of materials as those of which the building is constructed; but not more than twenty-five (25) percent of the roof covering of a building shall be replaced in any period of twelve (12) months unless the entire roof covering is made to conform with the requirements of this Code for new buildings.

Source: Jefferson County amendments to Building Code.

Architectural services are needed here for proper reconstruction. Firstly, review/revision/acceptance of the ceiling/roof assembly and the current fire-rating of this structure or a sealed detail for reconstruction.

Architect should review and establish fire-rating requirements for both the roof assembly and the roof membrane based on their review of existing construction. Most commercial projects require at least a Class C roof covering (See 2009 IBC Table 1505.1). This requirement does not address the requirements for the roof assembly, which is more than just the membrane and depends on occupancy/use group and is typically a UL-listed assembly. The architect must provide a sealed detail at this location if the existing UL assembly cannot be determined.

Though we are familiar with the code requirements here, an Alabama licensed architect is required to seal an architectural detail for the appropriate repair/membrane replacement.

3.0 Conclusions:

- 3.1 Given the interior water damage, the roof assembly is water damaged to varying degrees. The existing roof deck sheathing is metal. As part of the re-roofing it will be necessary to secure approval of the decking (by the building official) that it is acceptable for re-use. Corrosion on the bottom has been noted (Figure 81, Building 3). The extent of topside corrosion cannot be fully known until the roof membrane is removed. Several areas had little to no corrosion and high efflorescence, it is our expectation that this is due to recent water leakage in these areas associated with storm-created openings above. Metal deck, where it is more highly corroded is questionable for re-use and should be fully exposed and inspected for re-use (Alternative Materials, 2006 IBC 104.11), or replaced to satisfy manufacturer requirements for solid substrate.
- 3.2 Damage from the storm has allowed water to effectively destroy the insulation value of the underlying materials requiring complete replacement of the roof membrane to access and replace the damaged insulation. According to information provided by the owner the damage on the interior occurred as part of the storm event.
- 3.3 There are water damaged materials under the EPDM, the top material is fiberboard, and is fully adhered (no stress plates were found during roof cores, nor were any visible through the membrane). The water-damaged materials must be removed as it is caused by the storm damage to the membrane. This water damage has reached the interior ceiling tile, thus whatever insulation boards are present are also expected to be water damaged in areas (core cuts support this). These damaged boards should be replaced as the water reduces their R value and the most expedient means to dry them out is to replace them.
- 3.4 As part of the re-roofing, it will be necessary to secure approval (by the building official) for reuse of any of the metal decking that is left in place, it must also be satisfactory to the insulation board manufacturer, membrane manufacturer and the building official.
- 3.5 Wind damaged the metal panel roofs, the parapet wall top caps and the roof penetration covers. These elements will also require removal and replacement.
- 3.6 Any attempt to "re-use" light weight insulating concrete will require either drying the system completely, or removal and replacement. Once the system is either dry or replaced and fully cured, fastener testing (for mechanically attached insulation will be needed). It is our expectation that large portions of this roof will be too wet when exposed and will also be damaged or destroyed by the water intrusion (See roof cores).

- 3.7 Repair to all roof-mounted HVAC units will be 'forced' due to removal and disconnection to replace roofing. IECC requires repairs to meet current code (2009 IECC 101.4.3). As some units are older, and some are currently in a hail-damaged condition there are several options to establish conformance. These options apply to any HVAC unit that is detached from the roof, whether damaged by the storm or not.
- 3.8 IECC requires repairs to meet current code (2009 IECC 101.4.3). As the units are currently in a damaged condition there are several options to establish conformance.

101.4.3 Additions, alterations, renovations or repairs. Additions, alterations, renovations or repairs to an existing building, building system or portion thereof shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions, alterations, renovations or repairs shall not create an unsafe or hazardous condition or overload existing building systems. An addition shall be deemed to comply with this code if the addition alone complies or if the exist-

ing building and addition comply with this code as a single building.

Source: 2009 International Energy Conservation Code

- A) Test units as-is to see if they conform to current codes for efficiency. If so, reinstall without any work needed. If the unit efficiency tests fail, select B, C, or D. (Least cost, highest risk of wasting money on testing).
- B) Comb the units, then test, if the unit efficiency tests fail, select C, or D.
- C) Replace coils with OEM coils, then test, if the unit efficiency tests fail, select D and replace the units. (Coil availability is unknown).
- D) Omit all the testing and replace the units. (Highest cost, least risk of wasting money on testing, least schedule impact, etc.)
- 3.9 The roof system (open web steel joist) was originally designed for the weight of a BUR system (see roof cores). Removing it reduces the load on the roof and creates some question as to an increase in net uplift on the joists, based on their age, they will need uplift bridging at a minimum at the first interior bottom panel point, as well as evaluation and design for the changed uplift conditions due to the weight change of the EPDM system (about 2 psf) from the BUR+EPDM (about $5.5 + 2 = 7.5$ psf), this needs to be done by a licensed civil or structural engineer.

At the same time, a full inspection of the LWIC/deck should be performed. If the engineer of record finds the deck acceptable it can remain in place, provided it is still in good condition similar to currently manufactured deck. Some sheets (based on observed rust) should be planned to be replaced at this time, with the deck attachment schedule and gage determined by the engineer with sealed drawings for the replacement and how it is to be attached to the existing materials.

3.10 Various additional items of note:

1503.3 Coping. Parapet walls shall be properly coped with noncombustible, weatherproof materials of a width no less than the thickness of the parapet wall.

[P] 1503.4 Roof drainage. Design and installation of roof drainage systems shall comply with Section 1503 and the *International Plumbing Code*.

1503.4.1 Secondary drainage required. Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

Secondary drains need to be provided (if missing), primary drains must be checked for size to re-use.

1504.3 Wind resistance of nonballasted roofs. Roof coverings installed on roofs in accordance with Section 1507 that are mechanically attached or adhered to the roof deck shall be designed to resist the design wind load pressures for components and cladding in accordance with Section 1609.

1504.3.1 Other roof systems. Roof systems with built-up, modified bitumen, fully adhered or mechanically attached single-ply through fastened metal panel roof systems, and other types of membrane roof coverings shall also be tested in accordance with FM 4474, UL 580 or UL 1897.

1504.3.2 Metal panel roof systems. Metal panel roof systems through fastened or standing seam shall be tested in accordance with UL 580 or ASTM E 1592.

Exception: Metal roofs constructed of cold-formed steel, where the roof deck acts as the roof covering and provides both weather protection and support for structural loads, shall be permitted to be designed and tested in accordance with the applicable referenced structural design standard in Section 2209.1.

1504.5 Edge securement for low-slope roofs. Low-slope membrane roof system metal edge securement, except gutters, shall be designed and installed for wind loads in accordance with Chapter 16 and tested for resistance in accordance with ANSI/SPRI ES-1, except the basic wind speed shall be determined from Figure 1609.

1504.6 Physical properties. Roof coverings installed on low-slope roofs (roof slope $< 2:12$) in accordance with Section 1507 shall demonstrate physical integrity over the working life of the roof based upon 2,000 hours of exposure to accelerated weathering tests conducted in accordance with ASTM G 152, ASTM G 155 or ASTM G 154. Those roof coverings that are subject to cyclical flexural response due to wind loads shall not demonstrate any significant loss of tensile strength for unreinforced membranes or breaking strength for reinforced membranes when tested as herein required.

1504.7 Impact resistance. Roof coverings installed on low-slope roofs (roof slope $< 2:12$) in accordance with Section 1507 shall resist impact damage based on the results of tests conducted in accordance with ASTM D 3746, ASTM D 4272, CGSB 37-GP-52M or the "Resistance to Foot Traffic Test" in Section 5.5 of FM 4470.

4.0 Requirements / Recommendations

Based on the findings during the limited investigation we recommend the following steps be taken.

Engineering will be required to check joists for changed uplift loads and to accept or replace metal deck (a global evaluation should be performed).

For re-roofing we do not see any items that require partial engineering. Follow 2009 International Building Code, and 2009 International Energy Conservation Code, with local amendments.

Contractor is solely responsible for adherence to all applicable safety requirements for work at heights.

- 1) Prior to starting work, consult with city on pedestrian protection and lighting requirements for the work.
- 2) During work that affects access to the businesses, protect pedestrians adequately from work and falling debris, tools, etc, (i.e. covered scaffolds, or similar. Such work is the means and methods of the contractor.
- 3) Temporarily disconnect rooftop air conditioner units as required to remove and replace roofing under and around air conditioner. NOTE: AIR CONDITIONER MUST REMAIN IN PLACE AND WORKING IF WORK IS DONE DURING SUMMER MONTHS.
- 4) Remove all layers of roofing including metal roofs and parapet cap, underlayment, cover board, rigid insulation, previous roof membranes to lightweight insulating concrete.
- 5) Remove any unacceptable metal roof deck, unless approved to remain in place by licensed civil or structural engineer. Replace as required per sealed drawings (profile, metal gage, attachment schedule). Secure approval of local building official for reuse of existing roof deck.
- 6) Contractor's option: Dry out LWIC or replace. If LWIC is to be replaced, verify against available fire-rated assemblies.
- 7) Determine fire-rating requirements for the roof assembly. Architect to review roof assembly requirements and items listed above and issue sealed drawings for reconstruction of ceiling and roof membrane/assembly UL rated system as required.
- 8) Conform with any special inspection or structural observation requirements from the architect's or engineer's sealed plans and coordinate approval with the building official.
- 9) Roof covering shall conform with UL requirements on existing construction documents unless specifically reviewed, revised, and sealed by a licensed architect (i.e. a new UL rated roof assembly including the ceiling), and approved by the building official. Contractor Note: Secure architectural services for this if the existing plans cannot be located or if a change to the UL assembly is desired.
- 10) Verify placement of vapor retarder per (energy) code.
- 11) Once LWIC is acceptable for installation of base sheet, install per manufacturer's requirements and test mechanical fasteners as required.
- 12) Conform to current energy code for above roof deck insulation. Install base rigid insulation to meet current energy code (Contractor shall verify R-20ci applies). Attach per manufacturer's requirements, or install new insulation per Architect's sealed drawings (or manufacturer tested attachment schedule) to meet code. Insulation requirements for roofs have changed since the roof was originally constructed.

- 13) Roofing components will require attachment schedule per FM or manufacturer for code imposed loads at 90 mph, Exposure C.
- 14) Review of drainage on roof (drain quantity and size, conductors, leaders, scuppers, etc.) by mechanical engineer if not constructed as originally specified by a licensed mechanical engineer. Review, per International Plumbing code, should verify all items for 100 year hourly rainfall per P1106.1 (See IBC 1503.4), or similar document acceptable to the building official. Modifications may be required due to age of construction. If existing plans can be found, this step may be eliminated if the drainage plans are constructed/reconstructed as shown on those plans and those plans were stamped by a licensed mechanical engineer, and secondary drains are provided per current codes. We do not have Mechanical Plans for these buildings.
- 15) Roof drainage per IBC 1503.4, is for the number of scuppers/interior drains, not a study of the impact of this drainage to the watershed/infrastructure. Note: Secondary drainage is required per 2009 IBC 1503.4.1 when parapets exist such that water will be entrapped if the primary drains allow build-up for any reason.
- 16) Install topside tapered insulation per mechanical engineer's sealed layout drawings and attach per manufacturer's requirements for 90 mph uplift. Note: This is in addition to any insulation on the roof for energy code conformance (required per code as well as EPDM manufacturer). Attach to base insulation sheet per manufacturer's requirements.
- 17) Install tapered insulation per manufacturer requirements, including secondary deflection to scuppers or overflow drains (i.e. crickets). Note: the $\frac{1}{4}$ " per foot slope requirement applies at the low roof edge against the parapet wall, full length of the wall between the through-the-wall scuppers.

1507.12 Thermoset single-ply roofing. The installation of thermoset single-ply roofing shall comply with the provisions of this section.

1507.12.1 Slope. Thermoset single-ply membrane roofs shall have a design slope of a minimum of one-fourth unit vertical in 12 units horizontal (2-percent slope) for drainage.

- 18) We suggest contacting GAF tapered roofing group (or similar) for further assistance on a complete tapered system.
- 19) Replace damaged metal roofs, ridge covers, and parapet caps.
- 20) Replace roof jacks, vents, and other roof items (more cost effective than removing, securing approval from building official to reinstall).
- 21) Replace roof flashings and other roof metal (more cost effective than securing re-approval for reinstallation of materials).
- 22) Install replacement roofing per manufacturer's requirements. Note: Replacement roofing shall match existing roofing (EPDM). This is to avoid engineering evaluation due to 5% weight change on the roof. Note: Reducing the weight creates larger uplift on the roof deck, open web steel joists, etc, and is not advised.
- 23) Construction and engineering (diaphragm evaluation and connection/collector review) will have to comply with ASCE 7-05. Licensed civil or structural engineer of record shall verify. Change to uplift based on change to roof dead

weight will necessitate a full review of load path and structural framing. As much as practical, we advise against changing the dead load on this roof.

- 24) Provide/obtain/perform uplift testing as required.

1504.3 Wind resistance of nonballasted roofs. Roof coverings installed on roofs in accordance with Section 1507 that are mechanically attached or adhered to the roof deck shall be designed to resist the design wind load pressures for components and cladding in accordance with Section 1609.

1504.3.1 Other roof systems. Roof systems with built-up, modified bitumen, fully adhered or mechanically attached single-ply through fastened metal panel roof systems, and other types of membrane roof coverings shall also be tested in accordance with FM 4474, UL 580 or UL 1897.

Note: This testing is generally manufacturer testing included with stock products.

- 25) All rooftop penetrations, drains, skylights and other items (HVAC) will have to be lifted and reset. Reconstruct roof curbs as needed. Items to be reinstalled must be tested to demonstrate equivalence to new items, per code, and energy/air infiltration requirements, per IECC. Contractor's option: Discard and replace items with new units that meet code/engineer specified design pressures.
- 26) Inspect air conditioners for efficiency, if older, test for efficiency. If units do not meet current energy code efficiency requirements, replace AC units.
- 27) Install noncombustible, weatherproof (i.e. metal) perimeter flashing per ES-1 standard and code and manufacturer's requirements, typically with a cleat into the parapet wall. (See IBC 1504.5)

1504.5 Edge securement for low-slope roofs. Low-slope built-up, modified bitumen and single-ply roof system metal edge securement, except gutters, shall be designed and installed for wind loads in accordance with Chapter 16 and tested for resistance in accordance with Test Methods RE-1, RE-2 and RE-3 of ANSI/SPRI ES-1, except V_{ult} wind speed shall be determined from Figure 1609A, 1609B, or 1609C as applicable.

- 28) Remove and replace water-damaged ceiling tiles, ceiling grid, and light fixtures. Replace water damaged ceilings and light fixtures (Electrician needed for light fixtures). Tiles shall match existing. Verify tiles are not required to be fire-rated (contact Architect, or find existing sealed architectural drawings) when they form a continuous system.
- 29) **Energy code requirements have not been finalized. Integration of existing building systems with vapor retarders, application of sealants, flashing and other items are the responsibility of the contractor.**
- 30) Contractor shall remain on alert for signs of mold during repairs and construction.
- 31) Alternate construction techniques may be acceptable provided a licensed design professional approves and signs and stamps plans and or shop drawings for these repairs. Means and methods are the Contractor's responsibility.

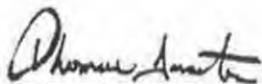
- 32) Stability during construction is the responsibility of the Contractor. Structure as detailed is intended to be stable once all sheathing and fasteners are in place.
- 33) Conform with any special inspection and testing schedules issued by the engineer.
- 34) Remove water damaged interior materials and effect repairs pursuant to current published guidelines by the Clean Trust (formerly the Institute for Inspection, Cleaning, and Restoration Certification, or IICRC) guidelines.
- 35) Roofing, siding, and sheathing attachment will have to comply with City of Bessemer wind speeds. This appears to be 90 mph, Exposure C, but engineer / contractor shall verify).

Note: Contractor shall make certain any roofing to be installed meet the requirements of the code in force through verification with the building official. Selection and installation of appropriate wind-rated and fire-rated roofing in compliance with the manufacturer's requirements and any associated third-party inspections required by the jurisdiction are the responsibility of the contractor.

Discovery is ongoing. Additional testing and inspections may need to be performed and additional and/or supplemental information and opinions may be contained in future reports issued by Forensic Building Science, Inc. This report is the exclusive property of the client noted previously and cannot be relied upon by a third party. Copies of this report are released to third parties only by written permission of the client.

Please contact our office should you have any questions or need additional information.

Respectfully submitted,



Digitally Signed
Tom Irmiter, President Forensic Building Science, Inc.
International Code Council Residential Building Inspector
and Property Maintenance Inspector, cert #5313388

August 20, 2015
Date



CITY OF BESSEMER
DEPARTMENT OF INSPECTION SERVICES

DANGER - KEEP OUT

CONDEMNED AS

Dangerous and Unsafe

This building is unsafe and its use or occupancy has been prohibited by the BUILDING DEPARTMENT

All persons are hereby notified to keep out as long as this notice remains posted.
Any persons willfully destroying, mutilating or removing this card will be punished to
the full extent of the law.

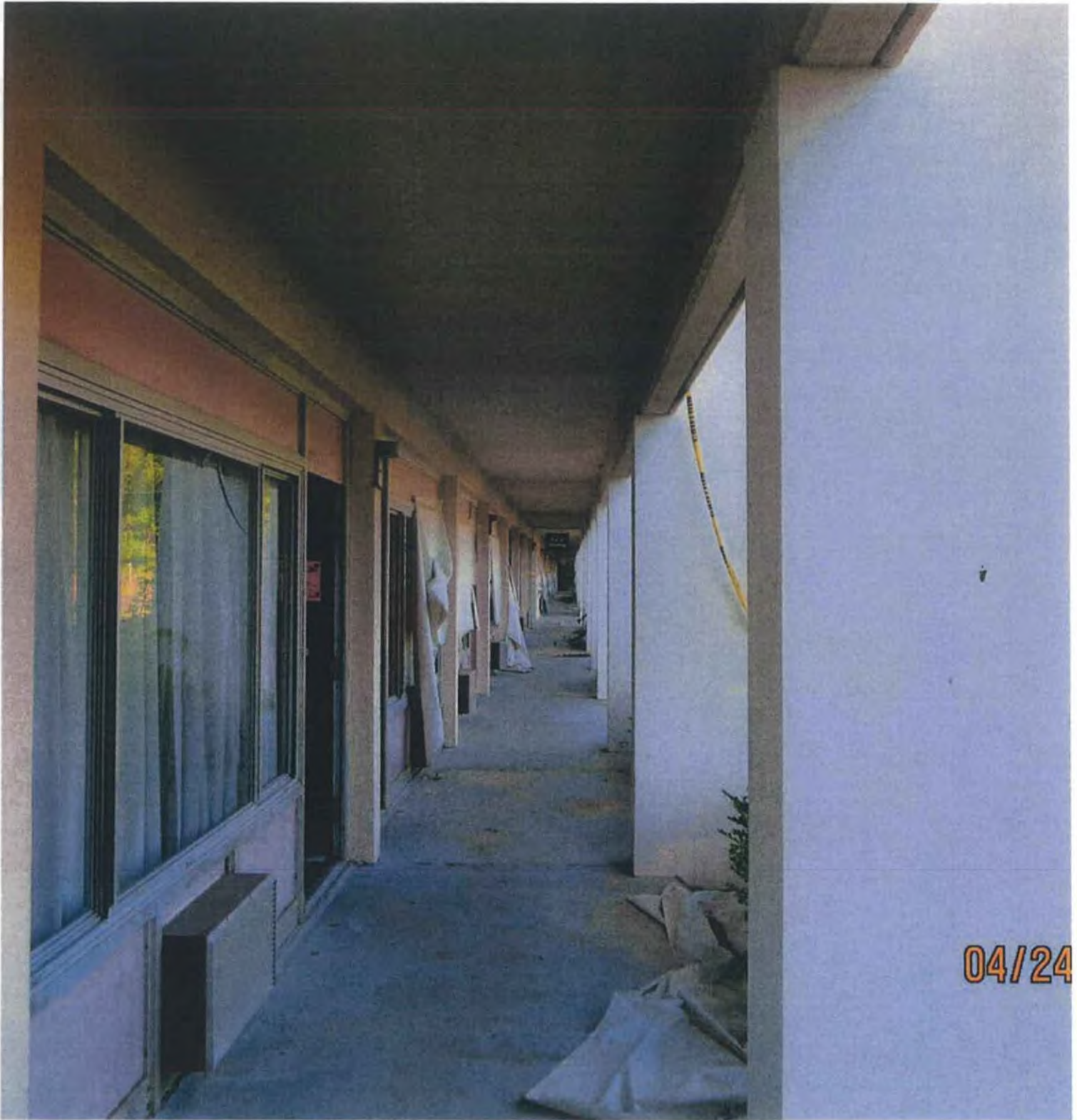
Posted under authority granted in the International Property Maintenance Code
as adopted by the City of Bessemer

DEPARTMENT OF INSPECTION SERVICES

04/24/



04/24/2019

























**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ALABAMA
SOUTHERN DIVISION**

HAMAN, INC.

Plaintiff,

v.

NO. 2:18-CV-01534-KOB

**CHUBB CUSTOM INSURANCE
COMPANY, ET AL.**

Defendant.

**PLAINTIFF HAMAN, LLC'S
DESIGNATION OF EXPERT WITNESSES**

Comes now the Plaintiff and lists the following expert witnesses pursuant to Fed. R. Civ. P. 26(a)(2)(B).

1. Charles "Chuck" Howarth – The Howarth Group, 137 Third Avenue, North, Franklin, Tennessee 37064, telephone (615) 550-5500, facsimile (615) 550-5501.

Mr. Howarth is an insurance consultant, appraiser and adjuster with over thirty-six (36) years of insurance claims experience. He is knowledgeable about the specific damages to the Knights Inn that were caused by both the fire loss and the storm loss. He and Arthur Grandinetti and Sarah Grandinetti performed detailed inspections of the premises at Knights Inn. Mr. Howarth will testify concerning damage assessments made during inspections made by The Howarth Group as they relate to damage, repair costs, replacement costs and actual cash value. Mr. Howarth's curriculum vitae, list of prior expert testimony, valuation of



loss, summary of opinions and hourly rate are attached hereto under Exhibit "A".

Mr. Howarth may also respond to any other testimony provided in his area of expertise, including any testimony that is offered by the Defendant Chubb. The Howarth Group prepared a report of observations of Knights Inn. That report related to the fire loss has been previously produced in this litigation and consists of 225 pages and numerous photos.

The Howarth Group has also prepared a separate wind and roofing damage report dated January 10, 2016, comprising the sum of 52 pages, and numerous photos. That report and photos has also been provided.

Mr. Howarth will base his opinions upon personal inspections and upon inspections of The Howarth Group.

Mr. Howarth has also reviewed the report of Tom Irmiter, Forensic Building Science, Inc., a roofing specialist.

Mr. Howarth is familiar with the reports and photographs provided by the Defendant Chubb.

Mr. Howarth is familiar with the insurance principles and policy terms and conditions and the requirements of good faith. He is particularly familiar with the appraisal process procedures and the policy in question. He is critical of the claims handling and of the appraisal conduct of Chubb and its representatives.

Mr. Howarth has had numerous meetings and interviews with the owner of the Knights Inn.

Mr. Howarth's opinions are based upon his knowledge, skill, expertise, training, education, and review of his firm's work materials, and the work materials of others and any other documents produced or generated in this litigation that were supplied to him. He has been provided with the Bates documents produced by Defendant. Mr. Howarth has not been provided with any deposition testimony in the case because there have been no depositions taken

prior to his designation as an expert.

2. Sarah Grandenetti – Sarah assisted Mr. Howarth with the Knights Inn claim. Her work product is included in the inventory loss estimate. Her curriculum vitae, valuation of loss, list of prior expert testimony and summary of opinions are provided herewith under Exhibit “B”.

3) Tom Irmiter, President Forensic Building Science, Inc., 2168 Juliet Avenue, St. Paul, MN 55105, telephone 651-222-6509.

Mr. Irmiter is a licensed building inspector and appraiser with over forty-three (43) years of experience. He has investigated literally thousands of storm and fire damage claims. He inspected the premises of Knights Inn and made a building damage assessment, listed as an initial report, rendered August 20, 2015. That detailed report has been provided to counsel for Chubb.

Mr. Irmiter will testify concerning the storm claims and the scope of the damage.

Mr. Irmiter may respond to any testimony provided in his area of expertise and any other testimony from any other witness concerning his area of expertise, including his review of opinions concerning the testimony of the Defendant’s representatives.

Mr. Irmiter visited the premises, made his own studies, photographs, calculations, observations and reports. His photographs are attached to his report.

Mr. Irmiter’s opinions are based upon his knowledge, skill, expertise, training, education and actual inspections, inspection reports and work materials of others, and other documents produced and/or generated in this litigation. Mr. Irmiter’s resume, expert testimony list and compensation schedule is attached hereto under Tab “C”.

4. Arthur Grandinetti - Arthur's work product, his evaluation of the losses, is including in The Howarth Group's estimate. He has personal knowledge of the losses and assisted with the evaluations. Those reports are referenced in The Howarth disclosures herein.

5. Plaintiff Haman, LLC reserves the right to call or elicit testimony, by deposition or at trial, from any expert witnesses designated and/or called by Defendant Chubb. Plaintiff Haman, LLC denies, however, that any such "experts" or other witnesses designated by Defendant Chubb are qualified and/or competent to testify as experts, unless and until, their qualifications to render opinions or testimony are established.

6. Plaintiff Haman, LLC reserves the right to amend and/or supplement its designation of expert witnesses pursuant to Fed. R. Civ. P. or pursuant to the Court's order with additional experts and/or opinions upon which the Defendant Chubb designates an expert and provides a report and complies with the Fed. R. Civ. P. and this Court's order and/or deposition testimony. Neither Chuck Howarth or any other Plaintiff experts have been provided with any deposition testimony in the case because there have been no depositions taken prior to this designation as an expert.

DATE: April 30, 2019.

/s/Gary V. Conchin

Gary V. Conchin (ASB 1263-C56G)
Attorney for Haman, Inc.

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/s/ Gregory A. Brockwell
Gregory A. Brockwell (ASB-9949-R49B)

/s/ Jason R. Smith
Jason R. Smith (ASB-2692-J50S)

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greg@brockwellsmith.com
jay@brockwellsmith.com

CERTIFICATE OF SERVICE

I hereby certify that on the 30th day of April 2019, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system, which will send notification of such filing to the following: Wayne D. Taylor, Michelle A. Sherman, and Mark D. Hess, and I certify that I have e-mailed and mailed by United States Postal Service the document to the following non-CM/ECF participants:

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/s/Gary V. Conchin
Gary V. Conchin (ASB 1263-C56G)



2000
600

EXHIBIT

Def 34
12.27.19

PENGAD 800-631-6989

feet
meters

Google earth





07/09/2015 08:42

PENGAD 800-631-6989

EXHIBIT

Def 35
12.22.19



07/09/2015 08:43





07/09/2015 08:44



07/09/2015 09:12





07/08/2015



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X

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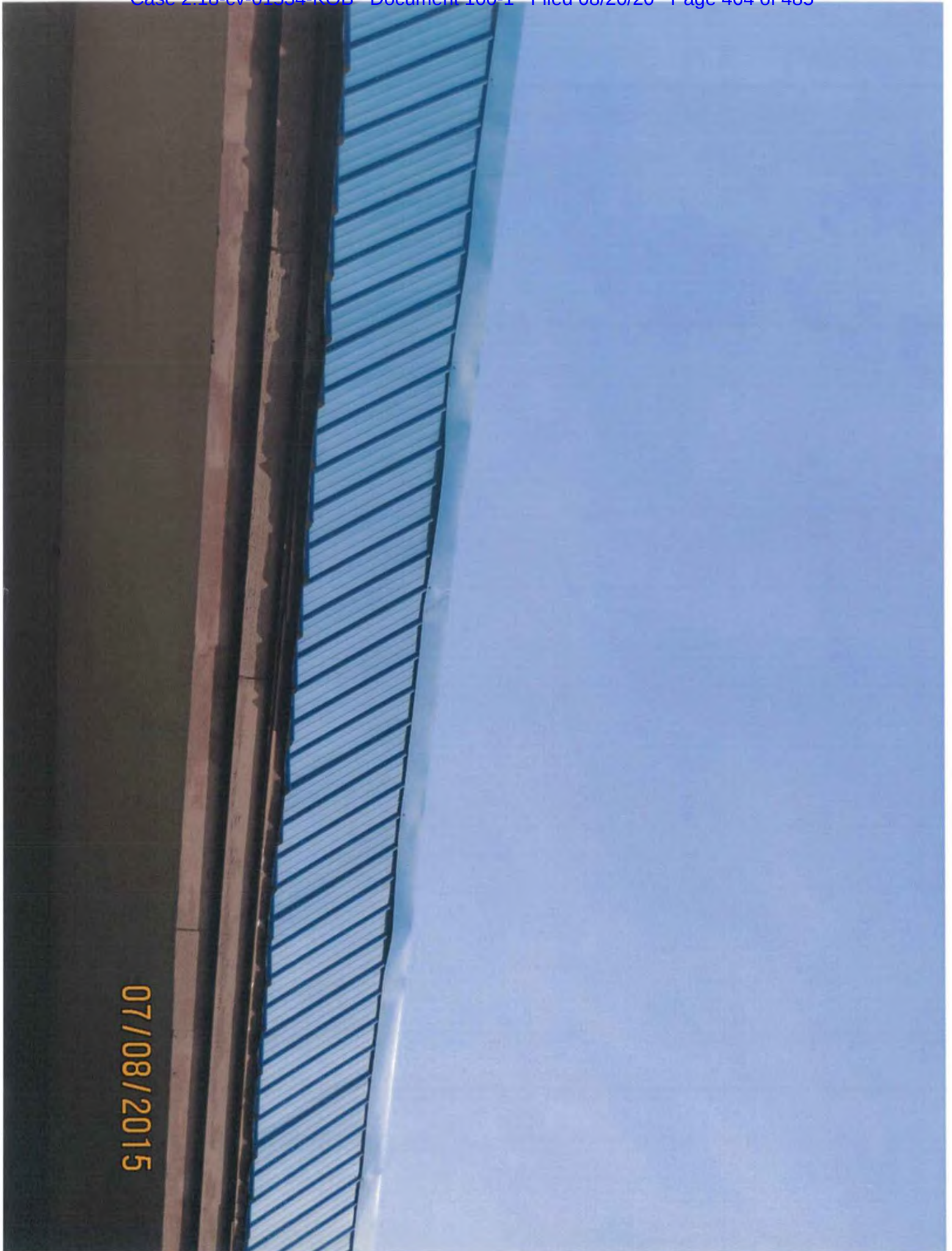
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CLIENT: KNIGHTS INN

LOSS ADDRESS: 1121 9th Avenue SW, Bessemer AL 35023

DATE OF LOSS: MARCH 22, 2014

DATE OF REPORT: AUGUST 10, 2015

EXPERT REPORT OF THOMAS J. IRMITER

This will serve as my expert report regarding the scope of the loss and required scope of repairs at the Knights Inn Buildings located at 1121 9th Avenue SW, Bessemer AL 35023. These repairs are required because of a fire, which occurred on March 22, 2014 hereinafter, referred to as ("the property damage loss").

I. Summary of Opinions

The following are my opinions regarding the scope of repairs and the property damage loss. The basis and reasons for these opinions, the data, and other information that I considered in forming these opinions, are identified in Sections IV, V and VI of this report.

A. Based on the site inspection and documentation of the damages conducted by Forensic Building Science (FBS), including review of the results of our soot sampling, I have concluded that the property in question located at 1121 9th Avenue SW, Bessemer AL 35023 has been damaged by fire and deposition of soot throughout the structure. Based on the sample results, and the type of construction in the building, it is my opinion that the fire caused substantial damage to the building through the deposition of carcinogenic soot into hidden wall, ceiling and floor cavities. This soot is still viable in the ambient air as evidenced by our sampling results. Water used to extinguish the fire contributed to fungal growth. Damage to the concrete slab at the cause and origin location will require replacement of the slab. Soot in the open cell CMU block and the unit separation walls will require complete demolition of these walls to remove the soot.

Until this soot is removed by proper remediation techniques, any activation of HVAC equipment or simple movement of exterior airflow through the buildings numerous open bypasses will continue to release the soot into the ambient air.

B. It is my opinion that removal of all wall and ceiling finishes, A/C units in affected rooms, cavity insulation, carpet, ceiling tiles and affected concrete slabs will be required in the building to expose the framing members for the purposes of removing soot from the porous wood

Knights Inn – fire claim 1



materials. Soot in open conduit and CMU wall cavities will require removal and replacement of the wiring and CMU.

II. Qualifications

A. I have approximately 35 years of experience in the building failure analysis, estimating, project management, forensic building inspections and construction industry. My qualifications are summarized in my Curriculum Vitae (CV), which was provided with this report. Since 2004 I have owned FBS and as principal of FBS, I have conducted on-site inspections and evaluations (both non-invasive and destructive) of foundation assemblies, wall assemblies, curtain and storefront walls, soffit assemblies and attic/roof assemblies to evaluate as-built conditions and determine causation for damages to these various assemblies. I have conducted water and air infiltration testing and negative and positive air pressure testing and evaluations on buildings. I have conducted numerous fire loss investigations and collected air, swab and bulk microbial and soot samples. Preparing project specific repair scopes and unit price estimates as well as obtaining and reviewing bids from licensed contractors are also part of my duties. These projects have included both construction defect cases and properties damaged by other means, including fires. As a licensed building code official I have specific training in the design, construction and inspection of fire rated assemblies.

III. Compensation

A. FBS is reimbursed on both a fixed price and an hourly basis.

B. FBS's costs to inspect the property, collect samples, review reports and estimates and produce this report was \$7,500.00. My hourly rate is \$350.00 for any additional time spent investigating, providing rebuttal reports, and testifying at depositions and trial. I am also compensated for travel and lodging expenses.

IV. Basis for Opinions and Methodology, Data and Other Information Considered.

The basis for my opinions includes my background, training and 35 years of experience in construction and forensic investigation as well as:

A. The FBS site inspection of the property. The site inspection occurred on July 8, 2015. The inspection was performed by James Wille Irmiter and Adam Piero.

B. I have reviewed the following materials:

1. Estimate Breakstone Restoration
2. Proof of Loss Statement
3. York Statement of Loss
4. Information from County Web site
5. International Building Code, 2006
6. International Energy Conservation Code 2006
7. International Existing Building Code 2006
8. NFPA Life safety Code and Handbook 2015
9. ASTM D6602-13 Standard Practice for Sampling and Testing of Possible Carbon Black Fugitive Emissions or Other Environmental Particulate, or Both

10. ASTM D4840 Guide for Sample Chain-of-Custody Procedures
11. N.G. Carlson Analytical, Inc. Lab Report dated April 28, 2015
12. American Industrial Hygiene Association (AIHA), The Industrial Hygienists Guide to Indoor Air Quality Investigations, (1992)
13. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE); Thermal Environmental Conditions for Human Occupancy - ASHRAE Standard (ANSI/ASHRAE 55-2008) (2008)
14. Centers for Disease Control (CDC), National Center for Environmental Health (NCEH) Website: www.cdc.gov/nceh/
15. Department of Energy (DOE) Handbook: Fire Protection Volume II Fire Effects on Electrical and Electronic Equipment, DOE-HDBK-1062-96, August 1996.
16. Drysdale, D. "An Introduction to Fire Dynamics" Wiley and Sons, 1985.
17. Environmental Protection Agency (EPA), website, www.epa.gov.
18. Institute for Inspection, Cleaning and Restoration Certification (IICRC), website www.iicrc.org/consumers/care/fire-smoke-restoration
19. National Air Duct Cleaners Association (NADCA) ACR 2005 - Assessment, Cleaning and Restoration 2005
20. New York City Department of Health (NYCDH), "Exposure to Smoke from Fires" (accessed October 10, 2013), www.ny.gov.
21. National Institute of Environmental Health Sciences (NIEHS), website, www.niehs.nih.gov.
22. National Institute for Occupational Safety and Health (NIOSH) website: www.niosh.gov.
23. ANSI/UL 723, Standard for Test for Surface Burning Characteristics of Building Materials, 2008, Revised 2010.
24. ANSI/FM 4880, American National Standard for Evaluating Insulated Wall or Wall and Roof/Ceiling Assemblies, Plastic Interior Finish Materials, Plastic Exterior Building Panels, Wall/Ceiling Coating Systems, Interior or Exterior Finish Systems, 2007.
25. NFPA 921, Guide for Fire and Explosion Investigations, 2014 edition.

C. Furthermore, I have conferred with others at FBS which is reasonable and customary in the industry to consider expert reports, opinions and recommendations as to the nature, scope and reparability of damages in preparing estimates of the cost to repair and to replace such damages.

V. Knights Inn

A. Building Codes and Building Design

Building Codes and Standards protect buildings of all types for damages caused by fires. Section 3.3.26 of the NFPA Life and Safety Code defines the exposed open areas and partitioned areas in a structure two ways:

3.3.26 Atmosphere.

3.3.26.1 Common Atmosphere. The atmosphere that exists between rooms, spaces, or areas within a building that are not separated by an approved smoke barrier. (SAF-END)

3.3.26.2 Separate Atmosphere. The atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier. (SAF-END).

Based on my training as a code official The Knights Inn is defined as a "Common Atmosphere" area and as such is more vulnerable to damage from soot and smoke than a "Separate Atmosphere Area" as defined by the fire codes. There are no smoke barriers in this complex. In our opinion, proper scopes of repairs after a fire loss must first establish if the movement of soot and smoke in a building is possible, from one part of the building to another based on design and conditions.

These Life and Safety portions of the Building Codes are intended to accomplish four things:

1. Save occupant lives
2. Save Firefighters lives during the fire extinguishing process
3. Save or salvage parts of the structure that are not at the cause and origin location of the fire
4. Protect surrounding building from fire spread.

Limiting the spread of fires is accomplished by various methods including:

- Use of fire retardant building materials
- Unit fire separation walls
- Fire rated floors and ceiling assemblies
- Fire suppression systems
- Individual components within the floor, wall and ceiling assemblies which are designed to "block" fire spread
- Building separation distances known as setbacks

Little if anything in fire design addresses the spread of smoke and soot either within the structure itself when the cause and origin is inside the structure, or when the fire surrounds but does not consume the structure or part of it. Typical Life and Safety code requirements are designed to save lives and building, but do not address soot deposition during and after a fire.

Many building products that face outward to the fire or are exposed to the smoke and soot from the fire have surfaces that are less porous due to installation of wall coverings and paints onto these exposed surfaces. The backside facing of these materials is typically unfinished and in a "raw" condition. For example, Gypsum wallboard, insulation, and unfinished plaster and wood lath, carpet, carpet pad, Hollow core doors and ceiling tiles are very porous and more susceptible to infiltration of smoke and soot into the porous material.

Every structure has, as part of its intended design or develops from use, open bypasses that allow for movement of air both from the inside to the outside, commonly called exfiltration, and to

outside in movement commonly called infiltration. These openings are often put through fire separation walls either at the time of construction or after [Example See Figure 47 photo report]. While energy codes address these locations as concerns for loss of heat in the colder climates and loss of cool air in warmer climates, most of the focus is on the outside envelope, not the interior walls and how these communicate with ceilings, and floors through a building. This open communication between these various assemblies often lead to smoke and soot exposure in these cavities after a fire event. In older structures where changes in use and remodeling efforts have taken place over a number of years this can often lead to catastrophic losses due to deposition of carcinogenic soot into walls, floors and ceilings hundreds of feet away from the cause and origin of a fire.

B. Sampling Discussion

FBS conducted air sampling in wall and ceiling cavities along with open room ambient air samples in rooms where cavity sampling took place. In addition, we used bulk sampling and sterilized swabs as additional techniques to verify and cross check with the air sampling. Sampling conducted by FBS located the presence of residual soot in the ambient air in the room samples. In addition, soot was found in walls, ceilings and floor assemblies as well as conduit, and CMU block cavities.

Typically, in post fire remediation strategies recommended by fire restoration companies and insurance companies, walls, ceilings and floors that do not show signs of actual fire damage [e.g. char, physically burned materials] are left in place and either surfaced cleaned or repainted. Post remediation complaints from building occupants often include descriptions of a "lingering smoke smell" months and years later, particularly when large variations in temperature and humidity occur. Soot left in these cavities is "recharged" by this increase in water vapor drive from the humidity causing the smell to present.

FBS collected 25 indoor samples at the KNIGHTS INN ON JULY 8, 2015. The primary purpose of the sample collection was to determine whether or not smoke soot consistent with the reported fire event is in the wall and floor cavities, wire chase ways and other open bypass areas and assist in developing recommendations for repairs.

All of the air samples were collected with an air sampling pump calibrated to run at a volume of 15 liters per minute. The sample duration varied by location. The air samples were collected with Air-O-Cell sampling cassettes.

The ambient air samples were collected for a three to five minute sample period to use for comparison purposes.

The swab samples were collected in wall, floor or ceiling cavities and at conduit and mechanical chase ways. Sealed and sterilized swabs were used for each sample and they were placed within their own individual tubes to prevent any cross-contamination. One sterilized sampling tube was used for each sample then discarded to prevent any cross-contamination.

The sample locations were chosen based on my training education and experience and the site specific inspections and similar projects with similar failure mechanisms. All of the samples were collected and entered into a sample chain of custody. After the sampling was completed,

the samples were delivered to Neil Carlson, CIH, of NG Carlson Analytical. The analysis of the results are included in the report from him.

In addition to the sample chain of custody, the locations of all the samples were written down in a site log book so that the information can be more easily viewed.

VI. Soot Analysis and Interpretation

A. RE: Knights Inn 1121 9th Avenue SW, Bessemer, AL 35023. Samples taken by Jim Irmiter and Adam Piero on 7/08/2015. Samples received 7/20/2015. Samples analyzed 7/25/2015.

Air-O-Cell Samples (7/08/2015)

Location (description from chain of custody)	Fungal particles/ cubic meter	Primary Particles	Notes
1- Ambient air, room 170 (fire origin) 75 liters	850 Heavy Trace	Heavy Char most (>5 microns) Cladosporium spp. (37) Basidiospores (11) Asp/Pen like (3) Ganoderma spp. (2) Ascospores (2) Pithomyces spp. (2) Other fungal (7) Insect parts	

2– Interior wall bedroom, room 162 (22.5 liters)	5,550 Heavy trace	Light soot most (>5 microns) Moderate char most (>5 microns) Asp/Pen like (54) Stachybotrys spp. (2) Basidiospores (2) Ganoderma spp. (2) Ascomycetes (2) Pithomyces spp. (2) Cladosporium spp. (2) Other fungal (59) Sheetrock dust	
4– Interior wall bedroom, room 164 (22.5 liters)	<50 Very Light trace	Light soot and char (most >5 microns)	Fungal spores not noted
5– Interior wall vanity room 176 (22.5 liters)	220 Light trace	Light soot and char (most >5 microns) Stachybotrys spp. (3) Fungal fragment (1) Insect parts (1)	

6 - Interior wall bedroom, room 178 (22.5 liters)	270 Light trace	Light soot most (>5 microns) Asp/Pen like (4) Cladosporium spp. (2)	
7 - Ambient air bedroom 181 (75 liters)	27 Light trace	Light soot most (>5 microns) Asp/Pen like (2)	
8 - Interior wall bedroom, room 181 (22.5 liters)	59,500* Heavy trace	Moderate soot most (>5 microns) Light char most (>5 microns) Asp/Pen like (1,239)* Stachybotrys spp. (1) Chaetomium spp. (1) Ascospores (1) Cladosporium spp. (1) Other (96)* Insect parts	
9 - Interior wall conduit line, room 107 (30 liters)	1,670 Moderate trace	Light soot most (>5 microns) Cladosporium spp. (26) Asp/Pen like (14) Basidiospores (7) Ascospores (3)	

10 – Interior CMU wall bedroom, room 110 (30 liters)	1,100 Light trace	Light char and soot most (>5 microns) Asp/Pen like (9) Ganoderma spp. (1) Curvularia spp. (1) Chaetomium spp. (2) Urediniospores (1) Other fungal spores (11)	
12 – Interior wall bedroom, room 115 (22.5 liters)	15,300 Moderate trace	Light soot most (>5 microns) Cladosporium sphaerospermum (234) Asp/Pen like (42) Cladosporium spp. (27) Basidiospores (16) Chaetomium spp. (4) Stachybotrys spp. (4) Other fungal spores (14)	

13 – Interior wall bedroom, room 120 (22.5 liters)	6,000 Very Heavy trace	Light soot and char (>5 microns) Very heavy sheetrock dust Asp/Pen like (64) Cladosporium sphaerospermum (35) Stachybotrys spp. (9) Fungal fragment (3) Other (24) Insect fecal pellets	
14 – Interior wall bedroom, room 216 (22.5 liters)	2,000 Light trace	Very light soot Asp/pen (14) Stachybotrys spp. (12) Chaetomium spp. (5) Ascospores (4) Basidiospores (3) Cladosporium spp. (2) Ganoderma spp. (1) Fungal fragment (4)	

15 – Bathroom vent, Room 212, 30 liters	500 Light trace	Light soot and char Cladosporium spp. (13) Basidiospores (1) Other fungal spores (1)	
16 – Ambient Air, room 210, 75 liters	30,000* Heavy trace	Light soot and char Asp/Pen like (1,165)* Cladosporium spp.(220)* Stachybotrys spp. (190) Chaetomium spp. (68)* Fungal fragments (80)* Ascospores (30)* Wallemia like (20) Alternaria spp. Bipolaris like Other fungal spores (535) Insect parts+50+80+68+190+220+1165	

19 - Interior wall vanity room , Room 262, 22.5 liters	98,000* Heavy trace	Light soot and moderate char Asp/Pen like (1895)* Basidiospores (80)* Wallemia like (34) Stachybotrys spp. (31) Chaetomium spp. (6) Fungal fragments (80)* Ascospores (30)* Ganoderma spp. Alternaria spp. Epicoccum spp. Torula spp. Other fungal spores (80)* Insect parts	
20 - Interior wall bathroom, 268, 22.5 liters	No analysis	Sample not available	

21 – Interior wall bedroom, Room 277, 22.5 liters	10,400* Heavy trace	Light soot and char Sheetrock dust Asp/Pen like (50)* Cladosporium spp.(10) Basidiospores (60)* Stachybotrys spp. (1) Chaetomium spp. (4) Ascospores Fungal fragments (35)* Ascospores Other fungal spores (85)* Insect parts	
22 – Interior wall bathroom, 280, 22.5 liters	490 Light trace	Light soot and char Stachybotrys spp. (7) Cladosporium spp. (2) Ascospores (2)	

23 – Expansion Joint, NW side, 30 liters	93,000* Heavy trace	Heavy soot & light char some >5 microns Cladosporium spp.(1480)* Asp/Pen like (650)* Stachybotrys spp. (1) Chaetomium spp. (1) Epicoccum spp. Fungal fragments Ascospores Other fungal spores Insect parts (heavy)	
25 – Expansion Joint, SE side, 30 liters	1,200	Heavy soot & char some < 5 microns Cladosporium spp.(15) Stachybotrys spp. (1) Fungal fragments Other fungal spores (20) Pine pollen Plant stellate hairs (heavy) Insect parts (heavy)	

Swab and bulk samples (7/8/2015)

Location (description from chain of custody)	Fungal growth	Primary Particles	Notes
3 – Corrugated metal ceiling, room 162, bedroom	++++	Light soot and char Fungal mycelia (no id)	Fungal growth
11 – Insulation in bedroom, room 110	0	Moderate soot on the insulation	No fungal growth
17 – Bathroom vent, Room 210	+++	Asp/Pen like Light char	Fungal growth in patches
18 – Ceiling Joist, Room 210	++++	Penicillium spp.	Fungal growth
24 – Expansion Joint, NE side	++++	Moderate soot (> 5 microns) Fungal mycelia – No id	Fungal growth
26 – Expansion Joint, SW side	++++	Light soot (Most >5 microns) Alternaria spp. Asp/pen like	Fungal growth

Interpretation – variation on IICRC – standard

- 0 No fungal growth noted
- + Normal spore deposition – no growth
- ++ Elevated spore deposition – no growth
- +++ Patches of fungal growth
- ++++ Heavy fungal growth

Standard Definitions:

* Due to high count or heavy trace this number is an estimate.

Cu. Meter- Cubic meter

IICRC – S520 Standard and Reference Guide for Professional Mold Remediation (2008)

sp. and spp. – The "sp." is an abbreviation for "species." It is used when the actual species name cannot or is not specified. The plural form of this abbreviation is "spp." and indicates several species.

B. Description of Soot

Definition of Soot:

Soot is a general term that refers to the black, impure carbon particles resulting from the incomplete combustion of a hydrocarbon. It is more properly restricted to the product of the gas-phase combustion process but is commonly extended to include the residual pyrolyzed fuel particles such as cenospheres, charred wood, petroleum coke, etc. that may become airborne during pyrolysis and which are more properly identified as cokes or chars. The gas-phase soots contain polycyclic aromatic hydrocarbons (PAHs). The PAHs in soot are known mutagens and probable human carcinogens. Soot is in the general category of airborne particulate matter, and as such is considered hazardous to the lungs and general health. Soot is classified as a "Known Human Carcinogen" by the International Agency for Research on Cancer (IARC).ⁱ

C. The Impact of Soot in Hidden Cavities on Building Occupants

Soot and or char was found in all 19 air samples and in 5 out of six swab samples. This represents that 96% of the samples were confirmed positive for soot consistent with the fire event. In addition high levels of **Stachybotrys**, **Chaetomium** and **Asp/Pen** were found. These molds are consistent with heavier water events. Ambient samples taken in open areas all had soot in the ambient air. Based on our field investigations and soot sampling in wall cavities, soot from the fire was freely deposited throughout Knights Inn during the initial fire event and continues to be aerosolized in the ambient air. Movement of soot and cross contamination is caused by the general porous nature of the building envelope and the lack of proper initial remediation. In our opinion, any remediation efforts undertaken to date will need to be redone and have no value.

Based on the age and condition of the building at the time of the loss, transfer of air from one part of the building affects every part of the building at this loss location. The number of open bypasses between floors, ceilings and walls is innumerable.

According to the Environmental Protection Agency:

*"The actual composition of smoke generated during a given event is dependent on the type of fuel; different materials produce different compounds when burned (New York City Department of Health, NYCDH and University of Washington, UofW). Particulate matter deposited by smoke is mostly comprised of carbon (soot). The tiny particles in smoke do get inside structures. "If smoke levels are high for a prolonged period of time, these particles can build up indoors." (EPA, US Forest Service)."*ⁱⁱ In our opinion, this occurred at over 84% of the locations sampled at this site.

*"The odors which result from smoke can linger long after the immediate hazard of the fire and the smoke plume. This odor can cause nausea and headaches, respiratory issues, as well as an overall sense of annoyance at the constant smoke irritation for people. The lingering odor persists due to tiny microscopic particles that cling to the available surfaces (walls, furniture, floors, clothing, etc.) (TAMU)."*ⁱⁱⁱ

VII. Conclusions

Soot was found in over 96% of the samples taken in wall and ceiling assemblies at the Knights Inn Complex. The Unit separations expansion joint location also contained soot. The type of open construction with numerous bypasses in the building continues to move the soot throughout the building. We attribute the large mass of smoke and soot deposition into the adjacent areas away from the fire to the type of construction in place at the time of the loss. Open bypasses, and common partition walls that were open to floor and ceiling assemblies allowed the smoke and particulate soot to freely distribute into these cavities effecting virtually 100% of the building.

Damage to the Concrete slab and metal deck at the cause and origin locations will require removal and replacement of these replacements. Shoring will be required during the removal and replacement of the CMU walls.

Based on the results of the sampling, all interior finishes and cavity insulation should be removed to expose the framing for cleaning and/or removal. All bath fan and appliance ducting must be removed and replaced. All through wall AC units in affected rooms must be removed. All conduit with any open bypass in the conduit must be replaced. All CMU separation walls must be blocked off and sealed or removed. After completion of cleaning and material removal, additional clearance sampling should be done to verify that soot has been removed prior to installation of any mechanical, framing or insulation and final finishes.

Lastly, failure to remove the soot from the hidden cavities will expose future workers to exposure during future renovations and remodeling efforts.

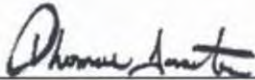
VIII. Scope of Repair

Based on our sampling results and inspection observations the following repairs should be performed:

A. Interior:

1. Interior trim, wall floor and ceiling materials including wall cavity insulation should be removed and replaced in all rooms that have exhibited soot contamination.
2. All exposed steel and wood framing, metal roof decking, and brick should be HEPA vacuumed. Exposed framing, metal decks, concrete and CMU materials that are not removed should be sprayed with a disinfectant. This includes all floor assemblies.
3. All AC units in affected rooms should be replaced.
4. All motorized pumps and blower fans should be replaced.
5. Secondary sampling for clearance prior to rebuild should be completed.

Forensic Building Science's opinions and recommendations are made without regard to coverage. The Insurance Carrier determines coverage and any issues related to coverage are the responsibility of the Insured and the Carrier. Discovery is ongoing. Additional testing and inspections may need to be performed and additional and/or supplemental information and opinions may be contained in future reports issued by Forensic Building Science, Inc. This report is the exclusive property of the client noted previously and cannot be relied upon by a third party. Copies of this report are released to third parties only by written permission of the client.



Thomas Irmiter, Forensic Building Science, Inc.

August 10, 2015

Dated:

ⁱ Reference

US Department of Health and Human Services. Public Health Service, National Toxicology Program. Report on Carcinogens, Twelfth Edition. 2011. Accessed at <http://ntp.niehs.nih.gov/ntp/roc/twelfth/roc12.pdf> on June 14, 2011.

ⁱⁱ Armstrong Analytical